

OUR MUSICAL HERITAGE
CURT SACHS

OUR MUSICAL HERITAGE

THE PRENTICE-HALL MUSIC SERIES

Douglas Moore, *Editor*

OUR MUSICAL HERITAGE

A SHORT HISTORY OF MUSIC

by

CURT SACHS

FROM THE MUSIC LIBRARY

6 -

HENRY W. WEST

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“Narrative history has the merit of telling what happened. But the reflective mind wishes also to know *how* things happen and *why* things happen.”

—JAMES WESTFALL THOMPSON
A History of Historical Writing

PREFACE

TO WRITE a new history of music, after so many other histories of music, is an audacious enterprise—justified only if the new history differs essentially from all its predecessors.

This volume departs from the scholarly histories in its shortness—required by its function both as a textbook for students of undergraduate and graduate level and as a handy introduction for non-students who wish to learn about the fate of music without too many confusing details and controversies or too biased a presentation.

From the many textbooks for colleges, this volume differs in a few important points. In the first place, it gives fairly equal space to all the phases of musical development, whether or not they belong to the pitifully restricted repertoire of our concert and home music. It does not carelessly skip the earlier stages on the ground that the average music lover does not know the music—for such an argument would wrong the very meaning of history. Even the most elementary history should impart to its students a notion of the limited scope of the time in which we live and a sense of the vast horizons that a knowledge of the past unrolls. Even the most elementary history should make its readers aware that the world of today and of ourselves is only a link in the endless chain of ages, each of which has tried to create a supreme expression of its mind and its trend, of its faith and its will. And even

the most elementary history should be free from the outworn, naive concept that such a chain represents a development from stages immature, preparatory, and therefore negligible, to unprecedented climaxes.

In the second place, this book avoids the somewhat cheap, misleading, and primitive method of focusing the reader's attention on the names of composers and other personalities, and tries rather to give him an idea of the essential trends of thought and style. To this end, care has been taken to restrict the number of names and the biographical details as much as possible. Instead, characteristic changes in musical language, life, performance, in form, notation, printing, and the construction of instruments have been treated much more extensively than in other textbooks. In doing this, the author has tried, as best he could, to answer the many eager questions that interested students, of undergraduate, graduate, and post-graduate level, have asked him during his career as a college professor.

It was particularly hard to cling to these principles in the chapters on modern music. Here, more than anywhere else, the mere enumeration of names was a temptation, and the author anticipates with regret the disappointment of those who do not find themselves or their favorite masters in the index. And here, more than anywhere else, the author had to be discreet in his criticism. For a textbook is not supposed to betray the personal taste of its author or to take sides in the inevitable clash of *pro* and *contra*. It has the task of noting the outer facts and of giving them a historic interpretation, without venturing on a premature criticism of masters, works, or trends too close to ourselves to allow for an independent judgment.

To quote from Christopher Simpson, author of *The Division-Violist* of 1659: *How far I have acquitted my self herein, must be referred to the Book it self; which hath now put on the confidence to appear in Publick.*

CURT SACHS

BIBLIOGRAPHY

A VERY LIMITED LIST of books has been added to each chapter. These lists are not meant to be complete: many works are unavailable, both in college and local libraries and at booksellers'; and our, alas, very modest reading knowledge of foreign languages would anyway be a serious handicap in a field in which the great majority of contributions have been made in languages other than English. Therefore, the short bibliographical appendices, concentrating on books of recent date and, so far as possible, in the English language, are intended only to give a first help to those students, teachers, and readers who want to go into details that the present book must leave untouched.

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The column *LISTENING* at the end of each of the early chapters refers to the two collections of older music recorded under the direction of the author:

2000 Y — *Two Thousand Years of Music*
 AS — *Anthologic Sonore* 1-125

The numbers of AS refer to the general, international numbering. The reader must be warned of the different numbering of the first ten records in the first American edition, which has been re-adjusted in the later editions.

The letters with which we indicate the notes of our musical system are given in italicized capitals without any additional symbol—as C D E—when they do not belong to a particular octave. Otherwise, mere capitals indicate the octave from the lowest C of the 'cello upwards; small letters, the octave from the lowest c of the viola upwards; one-lined c' is the colloquially so-called middle C; two-lined c'', the one above; and so on.

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OUR MUSICAL HERITAGE

1

THE PRIMITIVES

MYTHOLOGY IS WRONG. Music is not the merciful gift of benevolent gods or heroes. Wrong is the banal desire to see all slow, imperceptible germination emerge ready-made from the head of a single inventor; music is not the clever exploit of some ingenious man. And wrong, so far, are all the many theories presented on a more or less scientific basis—the theories that man has imitated the warbling of birds, that he wanted to please the opposite sex, that his singing derived from drawn-out signaling shouts, that he arrived at music via some coördinated, rhythmical teamwork, and other speculative hypotheses. Were they true, some of the most primitive survivors of early mankind would have preserved a warbling style of song, or love songs, or signal-like melodies, or rhythmical teamwork with rhythmical worksongs. Which they hardly have.

To call living primitives to the witness stand will at first sight bewilder those who are not familiar with modern methods of settling questions of origin. They probably would prefer the more substantial, indeed irrefutable, proofs of prehistorians, who excavate the tombs and dwelling places of races bygone. But not even the earliest civilizations that have left their traces in the depths of the earth are old enough to betray the secret of the origins of music. Moreover, the digging spade yields little in the field of music: the songs of stone-age men have faded away, and their instruments were probably, in the ma-

jority of cases, made of wood or cane and other materials too perishable to resist decomposition in ten or a hundred thousand years of interment.

Thus, the prehistory of music is after all referred to the anthropological method: to look for primeval tribes which, having retreated to far-away isles, secluded valleys, or inaccessible jungles, have in their growth been arrested on the level of stone-age civilizations in practically unadulterated condition.

This method is not without dangers. Are we sure indeed that their condition has been unadulterated after eons amidst an ever-changing world? Nobody could ignore so pregnant a question, and yet, a scholar with a solid anthropological background can easily elude the pitfalls of rash conclusions.

This, then, is the inevitable fact: whoever wants to know the origins and early rise of music must read them from fossil remains in primitive life of today.

The branch of learning in charge of collecting and reading these fossil remains is none too adequately called Comparative Musicology. Astride between anthropology and the history of music, its students are concerned with the phonographic recording, the analysis, and the interpretation of primitive music in all its forms.

PRIMITIVE ARE HALF-CIVILIZED TRIBES all over the world, and 'primitive' to a certain extent are also a great many peasants, fishers, and cattlemen in Europe and white America. Not primitive, on the contrary, are the upper strata of the oriental high civilizations, in the Near and the Middle East, in India and the East and Southeast of Asia. Outlining primitive against non-primitive music, and thus achieving an actual, strict definition of primitive music, is just as difficult—if not altogether impossible—as a definition of any action of man that reflects his spiritual rather than his practical world. An attempt to characterize the music of the primitive

would probably stress the total lack of theoretical system or even of basic laws, not to speak of notation, and would dwell on its social, collective, and more or less unindividual nature, which has allowed a tenacious tradition to be all important from age to age. Maybe the characterization would also emphasize the largely magical function of primitive music, which has hindered it from being an art in its own right, meant to amuse or to edify. But anybody really familiar with the musical life of the primitives would more than hesitate to include these traits in a binding definition.

THE NON-AESTHETIC NATURE of primitive music is particularly obvious in the field of its instruments (*cf.* the illustrations in Sachs, *The History of Musical Instruments*, pages 27-48).

The number and variety of instruments in the primitive world are amazing. All suitable raw materials that nature offers are eagerly taken and turned into some sound-producing implement: bone into whistles and bull-roarers; reed into stampers, trumpets, and flutes; nuts and calabashes into rattles; shells and hollow branches into trumpets; trees into gigantic slit-drums; pits in the earth or logs of trees and pieces of animal skin into drums. At an early stage of civilization, mankind learns how to produce a sound by striking, slapping, pounding, shaking, scraping, rubbing, blowing. All this is done immeasurable eons before the invention of pottery and metal founding.

But in every part of the world, in north and south and east and west, the instruments thus won serve magical rather than musical aims. Admirably well as early men and women know how to make and to handle their instruments with skill and imagination, they care little for aesthetic issues. The instruments, in all their properties, are meaningful, not attractive or beautiful. Their significant sounds, as soft or strong or muffled or shrill; their outer shapes, as round or pointed; their colors,

as lifeless white or bloody red; their very motion, as striking, stamping, scraping, or rubbing—they all entangle the early instruments in an intricate maze of pre-musical, magical connotations, far from aesthetic pleasure. Both as objects and as sound-emitters, the instruments stand for the mystic realms of the sun and the moon, for the all-creative male and female principles, for fertility, rain, and wind; and they act as the strongest charms at man's disposal when he performs the vital rites of magic to protect his health and existence.

They had a long, long way to travel before they grew from terrifying, magical charms into musical instruments for pastime and pleasure—from screaming bone whistles into soft, melodious fingerhole flutes, or from roaring megaphones into noble, solemn trumpets. Musical in the proper sense of the word, despite all magical connotations, are only the rhythmical instruments which answer the innate urge of man for regular, audible motion: rattles, stampers, or drums. And musical they are indeed: nothing could be more fascinating than to watch a Negro drummer or marimba player, to hear the inexhaustible riches of his rhythmical patterns and to observe the incomparable skill with which he strikes his instrument.

Stringed instruments, on the other hand, have been arrested in their most primeval state all over the world. For a primitive man has little reason to develop a class of instrument whose future lies in melody. To him, melodic expression is the realm of the singers, and he does not think of allowing his instruments to trespass and poach on vocal grounds.

Of these two opposite grounds, the vocal field possesses by far the older rights. Tribes in the lowest stratum of culture do sing, but have no instruments.

MUSIC BEGAN WITH SINGING.
The singer, impelled to give an orderly shape to the sound of his voice, found two different, opposite ways of expression. One

has led to a style in which a simple, monotonous singsong conveys some text as an unassuming vehicle only and allows the words to dominate: it is *logogenic*, or word-born. The other style, much less interested in words, consists in fierce discharges of excess force, irritation, and tension: it is *pathogenic*, or passion-born.

The earliest logogenic melodies—in Patagonia, Ceylon, and elsewhere—alternate between a mere two notes at any distance from each other. The distance varies with the races and tribes; it is here a short wholetone, here some size of third, and exceptionally even a fourth. But it is constant within the same piece and usually also within all tunes of a tribe.

In a long evolution, whose stages we easily trace, the original range of logogenic music has grown. Another and still another note has crystallized around the nucleus of two; in earlier stages only timidly at the beginning or the end of a tune and not in the middle, where tradition prevails and stubbornly resists innovations, but in later stages with greater assurance and consistency. Nevertheless, even in riper, elaborate styles the original nucleus of two can very often be clearly distinguished.

In the pathogenic style, on the contrary, the voice leaps noisily up to the top and staggers to the bottom in wild and rumbling cataracts of shouts and wails, in which, in the process of growing organization, some definite intervals, as octaves, fifths and fourths, or even thirds, become accented footholds.

A merger of the two elementary styles begins when the logogenic singsong reaches or even exceeds the range of a fourth and there resistlessly succumbs to the inherent urge of this interval to descend rather than to mount. Quite often, the result is a form of singing in which the melodic line, beyond the meek subservience to the words in the logogenic style and beyond the unbridled emotion of the pathogenic style, takes the lead in its own right and becomes *melogenic*.

It deserves attention that in all these styles the size of the standard step—for instance, the wholetone, the minor, or the major third—depends upon the motor type of the singer.

Tribes that dance in wider strides and leaps seem as a rule to sing in thirds or fourths rather than in seconds, and the women of a tribe sing very often in considerably narrower steps than do the men, just as their dancing steps and gestures are shorter.

It also deserves attention that a thorough research with phonograph recordings of the babble songs of European children three and four years old, conducted by the psychologist Dr. Heinz Werner, then in Vienna and now in the United States, shows the amazing fact that the children's singing style is very close to the earliest singsong of two, three, and four notes in primitive cultures. In this case, too, in the current of evolution, the trend becomes descending once the range of a fourth has been reached.

Over and over again, alas, our children repeat the tiny pattern of their melody, and so do the primitives. Dramatic development towards a melodic climax or embodiment of the small in larger patterns are not yet considered, either in the world of the child or in that of the primitive.

Still, in the endless repetition of a monotonous phrase, which in the form of the Catholic supplication or litany has survived in the modern world, the primitives have found two ways into a higher organization.

One of these two ways is the regular alternation between two answering half-choruses ('antiphony') or between a leader and an answering chorus ('response')—a way of vitalizing tedious repetition, dear ever since to singers in the East and in the West.

The other way into higher organization has affected the individual phrase itself, and that on a remarkably low level of civilization. Two consecutive phrases unite to form a 'period,' in which, as in a modern song, the first of the phrases ends in suspense on a less important note, while the second, similar phrase ends on the principal note and thus concludes the period. Technically speaking, a very early stratum of humanity created the all-important form known as question and answer, as antecedent and consequent, as half and full cadence, or, in

the colorful language of the Middle Ages, as the overt and the close.

POLYPHONY IS HARDLY ESSENTIAL in the world of the primitives, though it exists both in the modest sense of using coincident notes and in a more presumptuous meaning.

When a group of people happen to sing the same melodic line without imposing on the performers the kind of rigid discipline characteristic of modern music, the result is a chance progress, as of people who join in a leisurely walk without falling in step or caring for any strict coördination of their movements. Such pseudo-unison is called *heterophony*, from the Greek word *héteros*, 'different.'

It also happens that several singers perform the same melody but at different pitches, so that two (or more) parallel lines, instead of one single line, are heard. Such parallels exist in many intervals, from the natural, entirely unconscious octaves in which the sexes or the ages sing together, through the semi-conscious fifths and fourths, down to conscious, artful, and western-like thirds, and even to trenchant seconds.

There are also sustained 'pedal' notes, or 'drones,' above or below the melody, as the primeval ancestors of modern organ-points. Lastly, a few tribes around the equator have developed actual canon singing as a consequence of impatient overlapping when groups in antiphonal or responsorial singing do not wait until their turn has come but enter before the leading voice has finished. Indeed, the natives of Flores sing in the strictest canon above a double drone of tonic and fifth, like that of a bagpipe.

Thus the primitives or—what amounts to the same—pre-historic races planted the seeds from which all higher music sprang in the East and the West.

Once more: that which separates primitive from higher

music is the repetitiveness within the individual piece without development to any climax and, in general, its essential dependence on tradition and the total lack of any intellectual approach, be it a script or a system in even the most rudimentary form.

READING: Curt Sachs, *The Rise of Music in the Ancient World, East and West*, New York, 1943: Section One. Curt Sachs, *The History of Musical Instruments*, New York, 1940: First Part. Curt Sachs, *World History of the Dance*, New York, 1937: Part One. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Chapter One.

2

THE ORIENT

ORIENTAL MUSIC, extending all the way from Morocco—and even parts of Spain—to the Malay Archipelago and spanning five thousand years from the remotest antiquity to the present day, has, despite its differences in space and time, a common stock of features sharply distinct from those of primitive music and also from those of western and northern music in the Later Ages.

The end of the first chapter hinted at the systematic, almost scientific approach in the higher civilizations of the East, at least in the hands of an upper class of musicians. This restriction points also to another important fact: the music of the high oriental cultures relies on professional musicians. The common, collective music of the tribe has become a separate 'folk music.'

The contrast is particularly manifest in the musical scenes of the Old Testament. In the nomadic times of the second millennium B.C., all the women sing and drum and dance on festive occasions, and even King Saul must send for the shepherd David to hear the soothing melodies of a lyre, but in the sedentary times of the first millennium B.C. the Temple of Jerusalem has its thoroughly organized and trained professional choir and orchestra of Levites with an annexed conservatory where two hundred and eighty-eight students are taught in twenty-four classes.

Within the musical profession, most countries have different classes or castes with different backgrounds, duties, and rights. They often are so strictly separated from each other that they sing and play in different styles and have the privilege of certain instruments and even of certain tunings.

What distinguishes oriental music more than anything else, is its surprising stability, tenacity, and inertia. Oriental music has on the whole been stationary, it has changed only at a rate which seems negligible when measured against the amazing speed of western developments in the last one thousand years from parallel *órgana* down to Beethoven and the styles of Schoenberg and Stravinsky.

Chinese music has still many traits of the 'classical' age, that is, of times two thousand years ago; and the principal instruments of China's national music—chimes of bells or stones and the longish zithers, neckless instruments with silken strings—are mentioned as early as the times around 1000 B.C. Despite decay, despite the age-old influx of Mongolian, Indian, and other musical idioms of the West, with all their oboes and cymbals, lutes and fiddles, the ancient pentatonic scales (see below) have tenaciously held their ground while Europe was consistently evolving from stages much earlier than the conception of gamuts to diatonic, chromatic, and twelve-tone scales; and the typically Chinese set of twelve non-tempered and ever uncertain, confusing semitones, or *lūs*, which a more than doubtful legend ascribes to the third millennium B.C., has yielded little of its unfortunate tyranny.

India is in a similar position. In all the fourteen or more centuries gone by since Bhārata wrote his bulky Sanskrit treatise on the arts of the theater, including the music of his time, the country has faithfully kept her complicated system of *śrutis*, or microtones, as the component parts of her tones and semitones; she has kept her *grāmas*, or basal scales, and all the intricacies of *rāgas* and *tālas*, or patterns of melody and of rhythm. However many instruments—lutes and fiddles, oboes and drums—reached the country through the Indus valley in

the northwest in the centuries after Bhārata, they never were able to change the age-old spirit of Indian music.

Near Eastern music—Arabian, Persian, and Turkish—still adheres to the practice and theory of the tenth century and uses essentially the same instruments that the earliest illuminations of Muhammedan books depict: the long-necked fiddle, the pear-shaped lute, the trapezoidal zither, the simple vertical flute without a mouthpiece, and the frame drum with its jingles. Nor has its noisy outdoor music changed, with its double-clarinets, oboes, trumpets, and kettledrums.

THE PREPONDERANTLY VOCAL character of all oriental music is another of these immutable factors. True, there has been purely instrumental music, but essentially to accompany dances only. The whole Old Testament has just one or two evidences of music without voice: when young David plucks the lyre to ease King Saul's depression (I Samuel 16:23), and maybe when Saul meets "a company of prophets coming down from the high place with a harp, and a tabret, and a pipe, and a lyre, before them" (I Samuel 10:5). Neither in the Middle East nor in India did music without singers ever gain any importance comparable to that which instrumental music has reached in the West since the Baroque—not to speak of its preponderance in the eighteenth and nineteenth centuries. Only in the Far East—in China, Korea, Japan, and the Malay Archipelago—did instrumental music attain a certain independence. There have been chamber ensembles and orchestras in the central and western parts of the Orient, to be sure. But whether we look at the bands that the court painters of ancient Egypt depicted on the walls of royal tombs, or at the huge orchestras of more than a thousand pieces that the annalists of Chinese emperors describe, or at the band from ancient Elam or Persia on a famous relief in

the British Museum, there are always singers who join the instruments in a common performance.

With the prevalence of singing, melody proper is the only essential element of music. True, simultaneous sounds have by no means been foreign to oriental music. Drones or pedal notes, the accidental con- and dissonances resulting from a wilfully inexact unison ('heterophony'), and even the casual accompaniment of outstanding notes by some octave, fifth, or fourth are frequent. But nowhere do they interfere with melody, nowhere do they become a real polyphony, counterpoint, or harmony. This is the reason why melody, which in the West relies on harmony so much that it often condescends to serve merely as a connecting line from chord to chord, has in the East developed to a refinement unknown in the white continents.

Most oriental melodies are organized in the framework of a falling fourth, which has been discussed in the previous chapter. Descending by steps or jumps, they come to a landing on the lower fourth and thus assume the form of a 'tetrachord,' or group of notes within the interval of the fourth as the skeleton. (*Tetra* means 'four.') Inside the fourth, the steps are often vague and changing even within the same melody.

Any melodic continuation beyond the fourth tends again to a setting in another similar tetrachord, which connects with the first one either by 'conjunction' or by 'disjunction.' Conjunct tetrachords share the bounding note and result in a 'heptad,' or group of seven, as the next higher organization. Disjunct tetrachords, on the contrary, follow a tone apart and therefore result in an 'octave,' or set of eight.



Notwithstanding minor deviations, most scales are either diatonic or else pentatonic.

While we colloquially use the word scale for the raw material of any melody, careful terminology would call a quality like pentatonic or diatonic, not a scale, but rather a *genus*, or 'gender': a gender denotes the sizes of steps within a melody but not their particular sequence. The sequence in which these steps appear, tone-tone-semitone or tone-semitone-tone, constitutes a scale. "A mode"—to quote from the author's *Rise of Music in the Ancient World* (page 67)—"is brought about by selecting one note of the endless set as a starter or tonic. All modes of a genus, though following the same sequence of notes, differ in the tonal relations within the octave, since their tonics differ: each mode implies a structure and tension of its own."

The diatonic, or heptatonic, gender, called after Greek *dia*, 'throughout,' and *hepta*, 'seven,' has seven steps in the octave, similar to the sequence of white keys on our pianos, five of which are wholetones, and two, semitones. This leaves two wholetones and one semitone to each tetrachord.

As a remarkable variety, the scale which, more than any other scale, 'sounds' oriental and is a favorite in the Near East and India as well as in those Western scores which try to convey the local color of the Orient, has, within the tetrachord, an augmented wholetone between two semitones—as G A_bB C—which we westerners know from our so-called harmonic minor scales.

The pentatonic gender, on the contrary, has only five steps in the octave, Greek *pente* denoting 'five.' In most cases, three of these five steps are wholetones, and two, minor thirds, in an 'anhemitonic,' or halftoneless, sequence, like that of the black keys on our pianos. In a few countries, however, such as in ancient Greece and in modern Japan, pentatonic scales are incongruously (though beautifully) composed of semitones and major thirds, as:

$E \text{ CB} | B \text{ GF}\sharp$ (descending conjunct)
 $E \text{ CB} | A \text{ FE}$ (descending disjunct)

The term pentatonic is correct even when the melody does not reach the range of an octave (so that there are, properly speaking, less than five steps). The alternation of either wholetones and minor thirds, on the one hand, and of semitones and major thirds, on the other hand, justifies the name whatever the span of the melody may be.

TRANSSCRIPTION AND CENTS. The steps of oriental music are often not only vague and changing but in principle so different from those of our own 'well-tempered' octaves of twelve exactly equalized semitones that transcriptions into western staff notation with its strictly set-off lines and spaces necessarily distort the specific character and flavor of oriental music and, for that matter, of primitive music, too. This shortcoming has been a much resented handicap in all our efforts to render exotic music in a readable form. So far, there is, despite a number of recent suggestions, not one adequate script in existence.

A scholarly approach, however, cannot acquiesce in ignoring the characteristic and highly important differences between oriental and western steps and must be able to convey an idea of their sizes even if this cannot be done in the way of notation.

Previous scholars described a step between two notes by the ratio of their two frequency numbers: when a step connects a note of 481 vibrations per second and another one of 441 vibrations, their ratio is 481:441. This designation is correct, but not exactly elucidating. What we need and want to know is: how far is it from the first to the second note? Or, to express it scientifically, we are not interested in intervals, but rather in distances.

The problem amounts to transforming division into subtrac-

tion, quotients into differences. This can be done by a simple logarithmic operation.

The most widely used logarithmic method of finding musical steps or distances is the System of Cents that Alexander J. Ellis devised in London in 1890. The following are its most important features:

(1) The well-tempered (piano) octave is the measuring frame work. Each of its twelve equal semitones is subdivided into 100 cents, or hundredths:

| | |
|-----------------------------|---------------------------|
| 100 cents: semitone | 700 cents: fifth |
| 200 cents: tone | 800 cents: minor sixth |
| 300 cents: minor third | 900 cents: major sixth |
| 400 cents: major third | 1000 cents: minor seventh |
| 500 cents: fourth | 1100 cents: major seventh |
| 600 cents: augmented fourth | 1200 cents: octave |

The non-tempered, perfect fifth would measure 702, and the perfect fourth, 498 cents.

(2) The logarithm of a cent is .00025, since it derives from the twelfth part of an octave, which in itself has the ratio 2:1. As a shortcut, the following table of cents and logarithms may be welcome:

| Cents | Log. | Cents | Log. | Cents | Log. |
|-------|------|-------|-------|-------|--------|
| 100 | .025 | 10 | .0025 | 1 | .00025 |
| 200 | .050 | 20 | .0050 | 2 | .00050 |
| 300 | .075 | 30 | .0075 | 3 | .00075 |
| 400 | .100 | 40 | .0100 | 4 | .00100 |
| 500 | .125 | 50 | .0125 | 5 | .00125 |
| 600 | .151 | 60 | .0151 | 6 | .00151 |
| 700 | .176 | 70 | .0176 | 7 | .00176 |
| 800 | .201 | 80 | .0201 | 8 | .00201 |
| 900 | .226 | 90 | .0226 | 9 | .00226 |
| 1000 | .251 | | | | |
| 1100 | .276 | | | | |
| 1200 | .301 | | | | |

(3) To find the cents equivalent to a certain ratio, the easiest way is to reach for a table of logarithms: (i) look up the

logarithms of each number; (ii) subtract them; (iii) compare the difference with the shortcut table, computing the hundreds, tens, and units, and you have the desired cents.

If there is no table of logarithms at hand, you avail yourself of the auxiliary number 3477 (which is easy to memorize, since the total of its digits is $7 + 7 + 7$); then you multiply the difference of the two vibration numbers by 3477, and divide this product by their sum. The ratio 481:441 gives:

$$\begin{aligned} 481 - 441 &= 40 \\ 40 \times 3477 &= 139,080 \\ 481 + 441 &= 922 \\ 139,080 \div 922 &= 151. \end{aligned}$$

This result is a good example of the superiority of the cent system. The ratio 481:441 does not convey any clear picture of the distance between the two notes in question. But the number 151, cent equivalent of this ratio, shows impressively that the distance is midway between 100 and 200 cents and therefore between a minor and a major second: it is a three-quarter-tone.

With the aid of this practical method, it is easy to win a clear and graphic picture of all the scales occurring in oriental music.

BEFORE EXPLAINING the scales of the Orient, it should be made clear that exactness in the intonation of steps or individual notes has little interest for singers but is of paramount interest to people who are at a loss as to how to tune or even to build their instruments.

Two among the innumerable scales devised between Morocco and East Asia have played a particularly decisive and often confusing role, even in the history of western music down to the present time. Musicians have called them with a certain optimism 'natural,' 'just,' or even 'pure.'

The obviously older of these two 'natural' scales—quite

wrongly called 'Pythagorean' after the none too certain role of Pythagoras in developing it—relies on man's innate awareness of perfect fifths and fourths—a perfectness and satisfaction that probably is caused by the very simple ratios between the frequency numbers of tones a fifth or a fourth apart, 3:2 and 4:3 (cf. Appendix). Wherever instruments have 'open' strings (not subject to stopping; harps and lyres, for example) the only natural way of tuning is: start from a certain string (say C) and tune another string to its upper perfect fifth (G), then revert to D, a fourth down, and go up to A by another fifth, and again revert to E, a fourth down, and so on. The opposite way, descending by fifths and going up by fourths, is just as good. In either form, we call this way of construction the cyclic or, colloquially, the up-and-down method. It yields both perfect fifths and perfect fourths. But it never leads to a perfect octave. This is easy to see: any progress in fifths means multiplying the ratio 3:2 by itself; and no power of 3 can ever coincide with a power of 2, which the octave 2:1 requires. The nearest note to an octave which the progress in fifths can provide is a B \sharp , which is 24 cents, or an eighth of a tone, too high. This critical difference of 24 cents is known as the Pythagorean *comma* (which must not be confused with the Didymean comma to be mentioned later).

The second and later of the 'natural' methods relies on the proper division of a string and therefore is a 'divisive' method. Sumer, Babylonia, and the adjacent countries were the first to have lutes, or stringed instruments with necks, on which the melody was produced, not by passing from string to string, as on harps and lyres, but by pressing down (stopping) and thus shortening one string at different places. In doing this, the players—or rather the scholars who observed them—found that the three 'perfect' intervals, the octave, the fifth, and the fourth, appeared when the strings were stopped in one-half, one-third, and one-fourth of their length. Indeed, an excellent major third was found in one-fifth, and an equally satisfactory minor third in one-sixth.

Still, thirds as well as seconds were different in the two methods. In the cyclic method, every wholetone (as the difference of a fifth, 3:2, and a fourth, 4:3) measures 9:8, or 204 cents. Consequently, the major third, being the sum of two wholetones, measures two times 9:8, or 81:64. In the divisive system, on the other hand, the major third, being stopped on one-fifth of the string, measures only 5:4, or 80:64. The difference 81:80 is called the *Didymean comma* after the Greek theoretician Didymos. It is equivalent to 22 cents, or about a ninth of a tone.

Having a major third of a slightly lesser size, the divisive system cannot have two wholetones of 9:8, or 204 cents. The second one is a little smaller, for subtracting the first tone of 9:8 from a third of 5:4 yields a tone of only 40:36, or 10:9, which corresponds to 182 cents.

Moreover, the semitone, being the difference between an unchanged fourth and a third of lesser size, must necessarily be larger in the divisive than in the cyclic system. A simple arithmetic operation shows that it is 16:15, or 112 cents, as against 256:243, or 90 cents.

Graphically:

| | CYCLIC | | DIVISIVE | |
|-----|---------|--------------|----------|--------------|
| C-D | 9:8 | 204 c. | 9:8 | 204 c. |
| D-E | 9:8 | 204 c. | 10:9 | 182 c. |
| E-F | 256:243 | 90 c. | 16:15 | 112 c. |
| | | <hr/> 498 c. | | <hr/> 498 c. |

The irreconcilable divergence between the two methods harassed the music of the West no less than that of the East, until the equal temperament, or division of the octave into twelve equal semitones, at last did away in the eighteenth century with the dubious so-called 'natural' intervals.

Temperament, or tuning compromise, in some form, however, is neither a western nor a modern achievement. It exists everywhere and in every time, now as a spontaneous, now as a wilful alteration of nature.

Wilful alterations are particularly striking in Southeast Asia and the western Muhammedan world.

In Southeast Asia, we find interesting and often fascinating changes in pentatonic genders. The two leading genders of Java and Bali, *salendro*, or *slendro*, and *pelog*, have almost lost their original character. *Salendro* had once minor thirds and wholetones, but so much have the thirds been shortened and the tones enlarged that they are virtually equalized and form an awkward set of five even steps, each of which measures around 240 cents, or six-fifths of a tone. The other gender, *pelog*, had originally major thirds and semitones, like the Japanese scale, which are not entirely lost but have been disfigured. The change seems, in either case, to be due to the neglect of finer shades, and a golden mean allows playing in different modes on the same instrument without additional gongs or slabs (in the same way that the *E* on a western keyboard, tuned down by a quartertone, would allow playing all pieces in both C major and minor). Such subterfuge is perfectly possible: the messages of the ear are decoded in our brains, and psychological interpretation often gets the better of physical facts—witness the *salendro* pieces, which all seem to be built of thirds and wholetones, although any experiment proves that there are none.

The 'neutral' third between the major and the minor third, to which the parenthesis in the last paragraph alludes, has indeed been realized in Siam. Obviously for the same purpose of a master-key arrangement for all possible modes with the least amount of notes, the scale is divided into seven equal steps which measure seven-eighths of a normal tone. Each two of them provide a neutral third of about 343 cents—that is, a major third less the two wanting eighths, or a quartertone—and the player can easily play in any of his pentatonic modes by skipping notes wherever he needs his thirds.

The music of the nearer Orient boasts of its three-quarter-tones. Their reason-for-being was obviously that the players, forced to perform according to the 'divisive' method and faced

with two neighboring wholetones difficult to keep differentiated, tended to exaggerating the difference and thus assimilated the size of the minor wholetone so much to the size of the semitone that—once more in order to avoid too tiny a dissimilarity—they equalized the minor wholetone and the semitone to form a three-quartertone each. The result in cents is $204 + 147 + 147 = 498$ cents.

Although the three-quartertone scale is actually a scale, there have never existed those intricate “scales” of seventeen or even twenty-two steps per octave that superficial knowledge has hung upon the Arabs and the Hindus. And since they have never existed, they cannot be claimed as godfathers to modern western quartertone music.

Actually, these so-called scales constitute the raw material out of which quite ordinary seven-tone scales are formed for use in melody. The famous alleged seventeen-tone scale of the Arabs reads:

SSs SSs SSs SSs SSs SS

where capital S stands for a semitone of 90 cents, and small s for the tiny supplement, or *comma*, of 24 cents that two semitones need to form a major wholetone. Speaking in western terms, this set allows for building, say, a major scale by organizing, without disarranging, the seventeen steps in this way:

| | | | | | | |
|-----|-----|----|-----|-----|-----|----|
| SSs | SSs | S | SsS | SsS | SsS | S |
| 204 | 204 | 90 | 204 | 204 | 204 | 90 |

that is, in tone, tone, semitone, tone, tone, tone, semitone. Or else we could build our ascending minor scale, again by organizing, without disarranging, the elements as:

| | | | | | | |
|-----|----|-----|-----|-----|-----|----|
| SSs | S | SsS | SsS | SsS | SsS | S |
| 204 | 90 | 204 | 204 | 204 | 204 | 90 |

that is, in tone, semitone, and four subsequent tones, plus a final semitone.

In a similar way, the Arabs build their own modal scales:

the seventeen elements allow the two semitones to stand wherever they are required. And the same is true of the alleged twenty-two tone or *śruti* scale of the Hindus, which is more complicated only because it takes care of the 'divisive' principle with its two sizes of wholetones.

While in modern western music the scale as such is directly connected with the melody, one being the dead abstraction, and one, the live realization, the Orient separates the two by an intermediate concept, the pattern.

THE PATTERNS. To the freedom of western music, which allows, and even expects, a composer to create melodies of a fully individual character, the Orient opposes a strict, compulsory law, which forces composers to keep within a score or two dozen of traditional patterns, called *rāgas* (sing. *rāga*) in India and *maqamāt* (sing. *maqām*) in Arabian countries. Such a pattern—as, say, *rāst* in Persia, *mālkos* in India, or *nawā* in the western Orient—is not only characterized by its scale but also by its particular tempo, general curve, emotional atmosphere, and even melodic turns. The composer's freedom is limited to the few traits which do not interfere with the immutable qualities of the pattern.

Those readers familiar with the three so-called orders of Greek architecture will easily understand what such restriction means. The Hellenic builder was bound to the general plan of the temple and also to the proportions of the columns and to the particular forms of the architraves, friezes, and cornices that either the Doric, or the Ionic, or the Corinthian order provides. But he did not copy; all the Doric, Ionic, Corinthian temples, uniform at first sight, have individual traits.

In the music of the Orient, the melodic pattern is so vital that it is preconceived in lyrical poetry even before the words are composed: Arabian and Persian poets publish their poems

in bunches under the headings of the patterns which should be used in composition—at the beginning the *rāst* poems, then the *mahur* or the *kardan* poems. In a similar way, some fifty of the Hebrew Psalms have individual headings to indicate which pattern should be followed, such as *shoshanīm*, or *idūtūn*, or *mahalat*.

Conforming to melody patterns is intimately related with the strange procedure of ‘putting together’ one’s melodies—in the truest sense of the word *com-ponere*—out of a limited stock of ready-made, characteristic ‘melodicles,’ or turns.

This mosaic composition is best known from the ancient and modern cantillation of the Jewish liturgy. The cantor sings the Five Books of Moses all through the year in an easily flowing melodic train, which actually is the skilful, expressive combination of a score of given melodic turns, an ever-changing nosegay from a modest, though beautiful, flower bed.

This kind of composing has not been abandoned in the later West. It has left its traces in the Gregorian chant, in the Lutheran chorale, the Calvin psalter, the art of the *Meister-singer*, and the folksong of all countries. Indeed, Wagner’s principle of piecing together an unending melody out of *leitmotives*, particularly in the *Ring des Nibelungen*, is technically, though not spiritually, the principle of ancient Jewish cantillation.

RHYTHM, TOO, has been typified in India and the Muhammedan Orient.

When a Hindu or an Arab speaks of rhythm, he hardly thinks of equal beats in a western sense, with stresses on every fourth or fifth or seventh beat. Oriental rhythm is not ‘qualitative,’ a question of stresses, strong and weak. It is ‘quantitative,’ a question of duration, of long and short.

To give an example: a dactylic meter would, in western 'qualitative' conception, be strong-weak-weak, in triple time; it would, in eastern 'quantitative' conception, be long-short-short, in duple time.

Such quantitative rhythm, particularly in India, is organized in standard patterns, many of which are complicated and, from our viewpoint, hard to grasp: say, a seven-unit pattern of three *plus* two *plus* two, a ten-unit pattern of seven *plus* one *plus* two, or a fourteen-unit pattern of five *plus* five *plus* two *plus* two. Ceaselessly repeated all through a piece, these patterns are often emphasized on one or two hand-beaten drums with delicate shades of pitch and timbre. So important is the rhythmical pattern of a piece that it often forms a part of its title. Where we in the West would say, sonata in *F* major, the Hindu would say, *rāga* such and such, *tāla* (rhythmic pattern) such and such.

NOTATION, one of the characteristic features of high civilizations, exists in the East in various forms, although it is on the whole much less important than western notation.

(1) *Ecphonetic* or *group* notation is a script in which some symbol—a figure, a letter, a hook, or any other sign—denotes a whole characteristic group or formula of notes, a 'melodic,' as the present author has called it. Examples are the 'tropes,' or *ta'amim*, which go with every syllable of the Old Testament, also the Byzantine, Ethiopian, and Indian *veda* notations, and, most probably, the secret script of Babylonian priests.

(2) *Neumatic* or 'cheironomic,' that is 'gesture,' notation depicts the strides of the melody in individual signs—up, down, up-up, down-down, up-down, down-up, and so on—without indicating their pitches or width. The best examples are the early medieval neumes of Europe, which the fourth chapter will discuss. Kindred systems exist in the ancient Orient.

(3) *Pitch* notation, on the contrary, provides an individual sign—usually a letter—for each degree of the scale, without indicating steps as such. The majority of Indian and Far Eastern notations are of this kind.

(4) *Tablatures*, or fingering scripts, independent from absolute pitches, denote the strings to be plucked and the fingers that have to do the work. They are used in the Far East by players of the long-zithers.

Staff notation, developed in Europe around A.D. 1000, does not exist in the Orient except as a recent importation from the West.

The oriental world is also far from having any adequate notation of time-values (for which the musicians of Europe themselves had to fight a thousand years and which they eventually achieved only under the pressure of their un-oriental polyphony). Rhythmical signs exist in parts of the East, but they are in a rudimentary stage and have no real importance.

THE INSTRUMENTS of the Orient show their most peculiar features when compared to the instruments that we use ourselves.

The first, most striking difference is the lack of keyboards, which would indeed be meaningless in a monophonic civilization. Where they have been imported from the West in recent times, they are misused against their nature. The Arabs play in empty octaves on the piano, and the Hindus, in single, sustained notes on the harmonium.

The second difference that strikes the eye is the rudimentary state in which the brass and woodwinds have been left. Horns and trumpets, never used in oriental art music, are 'natural,' without any keys or slides or valves. And the numberless families of flutes and reed-pipes have open holes. And rightly so; for while the modern West insists on just intonation within

a rigid equal temperament, the East expects a flexibility, which in Japanese flute blowing is carried as far as driving up almost every individual note.

For a similar reason, stringed instruments are often left without frets, so that the finger can freely glide along the fingerboard. This is particularly significant in the case of the lute—above all, the short-necked lute—which is unfretted in its native western Orient but, when accepted in Europe during the Middle Ages, was at once provided with frets. Whenever oriental instruments have frets, they are easily shifted, such as the tied-on metal frets of the Indian *vīṇā* (illustration in the author's *History of Musical Instruments*, page 225) or the loosely set bridges on the *koto* of Japan. Indeed, in both the latter instruments, and in numerous others, the strings are thin enough and sufficiently high above the fingerboard to be conveniently driven up in pitch by an increase of pressure.

Borrowed instruments are immeasurably inferior in make and play to the violins of the West. Plucked instruments, on the other hand, attain a delicacy that in the world of the white man only a few exceptional players achieve.

The Orient holds absolute superiority in the realm of drums and *idiophones*. This scholarly name implies that the instruments sound (*phon-*) by their own (*idio-*) nature without needing a special tension, like drum-heads or strings; and the class includes a dizzying mass of wooden, bamboo, stone, glass, porcelain, and metal implements, to be pounded, shaken, rubbed, or struck. The West has borrowed several of them under the popular misnomer 'percussion,' such as church bells, gongs and cymbals, xylophones and metallophones (illustrations in *The History of Musical Instruments*, page 192), and, quite lately, the small rectangular redwood block with two lateral slits that the Chinese use in their temples.

Drum playing with the bare hands has, particularly in India and the western Orient, reached a perfection in technique, variety of timbre, and intricacy of rhythm that America

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 and Europe with their cruder stick-beaten drums have not even tried to imitate.

MAGIC CONNOTATIONS. Rhythmic and melodic patterns, genders and modes, scales and individual tones, and the very instruments have, in the Orient, more than aesthetic qualities. They are a decisive power in the delicate relationship of man and the forces of nature which, friendly or hostile, determine his fate; they are magic.

Sound has indeed the strongest magic quality of all that man can produce. A visible, touchable object may act on nature and destiny by the force of its peculiar matter or color, but these connotations must be known. The power of sound, on the contrary, is felt, as irritation, terror, peace. The magical role of music has, as a consequence, always been important in the beliefs of oriental nations. We read in the Bible that the Hebrews smashed the walls of Jericho with the sound of seven rams' horns, and in Greek mythology, the other way round, that Kadmos, the founder of Thebes, built the walls of the town with the tones of Amphion's lyre. Chinese and Hindu tales are full of episodes where singers make spring and summer, fall and winter, fire and water with their melodies. Ancient Mexican slaves went to their death while scraping bones and whistling their bone flutes to secure a life to come. And the Jewish highpriest wore bells and jingles on his garment when he passed the threshold of the Holy of Holies "that he not die."

As a consequence of such beliefs, music is not only connected with religion and its rites but also with cosmology, that is, with the meaningful interrelation of all the various aspects under which the universe presents itself, be they cardinal points, seasons, colors, matters, or natural phenomena.

In China, for instance, the drum is, through its skins, related with the cardinal point north, the season winter, and the ele-

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ment water; the pan-pipes, through bamboo, with east and spring and mountain; the zither, through the silk of its strings, with south and summer and fire; the bell, through its metal, with west and autumn and dampness.

In a similar way, each of the twelve semitones of the Chinese musical system belongs to a certain hour of the day and to one month of the year, so that, as a curious consequence, the sacred hymns are sung in twelve different keys during the year, rising by a semitone from month to month. Again, the normal five notes of the Chinese scale stand (1) for north, the planet Mercury, wood, and the color black; (2) for east, Jupiter, water, and violet; (3) for center, Saturn, earth, and yellow; (4) for west, Venus, metal, and white; (5) for south, Mars, fire, and red.

In India, too, the various patterns or *rāgas* are related to the colors, days of the week, elements, heavens, planets, seasons, signs of the zodiac, voices of birds, man's ages, human complexions, sexes, temperaments, and what not; and the *rāgas* are all assigned to certain periods of the day and must not, even now, be played at improper hours. In a similar way, one Arabian *maqām*, or melody pattern, belongs to the sign of the Ram in the zodiac and to sunrise, and it heals the eyes; another belongs to the Twins and the time of nine o'clock and is supposed to cure palpitation of the heart and dementia; a third one is connected with the Fishes, morning, and headache; a fourth, with the Bull and colds; a fifth, with the Lion and colic; a sixth with Capricorn and heart diseases.

But very little has survived of these connotations in the consciousness of the modern listener. Oriental music has almost entirely passed from the magical or half-magical stage to the aesthetic stage, in which all music—religious tunes excepted—is meant to please, and nothing else.

The kind of pleasure that it conveys may be a stronger delight than the one that western music inspires in the average listener. And on the whole, an essentially greater part of eastern music seems to soothe the mind and give it peace.

READING: Curt Sachs, *The Rise of Music in the Ancient World, East and West*, New York, 1943, Sections II, III, IV, VI. Curt Sachs, *The History of Musical Instruments*, New York, 1940. Second Part. Curt Sachs, *World History of the Dance*, New York, 1937, Chapter 4. Curt Sachs, *The Commonwealth of Art*, New York, 1946, Chapter One 2.

3

GREECE AND ROME

THE MAGIC MIGHT of music was a leading belief of the Greeks no less than of the eastern world. They gave it an incomparable allegory in the beautiful myth of the Thracian Orpheus, who with his singing overthrew the laws of nature, tamed the wild beasts, and rescued his wife Euridice from the realm of the dead.

In actual life, the musico-magic ideas of Hellas concentrated largely on healing, of the body as well as the soul. The choral paeans in honor of Apollo were originally medicine songs with the traits of primitive shamanistic rites. As late an author as the grammarian Athenaios, who lived around A.D. 200, assured his readers earnestly that "persons subjected to *sciatica* would always be free from its attacks if one played the pipes in the Phrygian *harmonia* over the parts affected"; and Aristotle, more convincingly and even in agreement with modern healing methods, related that persons in religious frenzy or otherwise insanely overwrought could be brought back to themselves again by carefully chosen melodies.

Such beliefs explain why in the ninth century, as the Greeks report, the Cretan composer Thalétas appeared at the side of Lykurgos, the lawgiver of Sparta, and why in a time of unrest, around 650 B.C., the Delphic oracle advised the Spartans to appoint the musician Terpander, that his melodies might

pacify the city. The good and the evil, order and chaos depended on music.

It was a logical climax that in the fourth century B.C. the greatest philosopher Plato recommended—as Confucius had done a hundred years before him in China—that the ideal State be erected upon the foundation of music and that any change in the traditional ways of music be resisted lest such deviation lead to a fatal change in the State as well.

This was by no means the phantastic, utopian concept of a single philosopher. In the same spirit of serious anxiety, the conservative Spartans were alarmed when, around 400 B.C., the then ‘modern’ musician Timotheos of Miletos performed with four additional strings on his lyre, and the court ordered them to be snapped off.

But the scientific mind of the later Greeks was not satisfied with mere tradition, belief, and experience. It needed a well-established system, a theory of the psycho-physiological effects of music on the State and on man, or, as they put it, a theory of the *ethos* of music.

This system they based on the age-old cosmology of the Orient.

In the complicated eastern concept of the world, certain patterns of melodies, or even single notes, were connected with certain planets and hence with the ethical qualities that the planets were supposed to impart to man: Jupiter, majesty; Mars, virility; Venus, effeminacy; Mercury, shiftiness; Saturn, sadness.

At least in later periods after the Golden Age, Greece knew these connotations but understood them in a purely ethical rather than in a magical sense: she dropped the planets as causes and established a direct psycho-physiological link between music and character. Thus, Aristotle could say in *Politics*: “The musical modes differ from one another, and those who hear them are differently affected by each. Some of them depress, as the so-called Mixolydian, others enfeeble the mind, as the ‘relaxed’ ones, others, again, produce a settled, moderate

mood, which appears to be the peculiar effect of the Dorian, while the Phrygian inspires enthusiasm." But there was little consistency. Other writers called the Dorian virile and bellicose; the Hypodorian, majestic and stable; the Mixolydian, pathetic and plaintive; the Phrygian, agitated and Bacchic; the Hypophrygian, active; the Lydian, mournful; the Hypolydian, dissolute and voluptuous.

But what were these mysterious Dorian, Phrygian, Lydian, Mixolydian?

The general assumption has been that character and mood belonged to the various modal scales thus named—scales that differed in the arrangement of their whole tones and semitones exactly as our Church modes and our minor and major do. This cannot be true, or at least it cannot be the whole truth. Modal scales, that is, the lifeless arrangements of tones and semitones, have little to offer in the way of *ethos*. They are but dead abstractions of the only thing that can impress the soul—melody, with all its significant turns and expression. There must have been an intimate, indelible connection between the scale of a certain name and all the melodies that followed it. In other words, the existence of *ethos* suggests that Greece, like the Near and Middle East, must have known what the Hindus call *rāga* and the Arabs *maqām*, the homogeneousness, in structure, mood, and character, of all the melodies belonging to a certain scale. Greece must have had melodic 'patterns.'

This train of thought would, at least partly, solve the fascinating, age-old problem of the Grecian *ethos*.

IT WAS PARTICULARLY on account of *ethos*, of the character-forming qualities of melodic patterns, that music, including pipe- and lyre-playing, was considered one of the most important branches of learning, often had precedence over grammar and arithmetic in school, and was, in Arcadia for example, compulsory up to the age of thirty.

Music resounded all over the country and its colonies. But comparatively little of it was professional. The oldest professional was the blind Homeric bard, a poet, singer, and lyre-player in one, who entertained the guests at the banquets of the great with the epical deeds of their ancestors. This honored, unassuming bard developed gradually into an arrogant, spoiled virtuoso who, in royal attire and with an impressive retinue, participated in the national contests, toured from city to city, and gave recitals in overcrowded arenas.

Music belonged to the drama too. The actors sang in what probably amounted to recitatives and *ariosi*, and the chorus, marching up in a semicircle in front of the stage and commenting on the action and fate of the heroes, performed in those responding antiphonies of a strophe, a similar antistrophe, and a different epode, which foreshadowed the so-called bar-form AAB of the *troubadours*, *Minnesinger*, and *Meistersinger*. Music was indispensable in the many solemn processions to temples and sacred woods at home (plate I) and to the national shrines in Delphi or Olympia, where the townships tried to outdo each other in the number, size, and quality of their choirs. Music embellished the home; every man was expected to sing at banquets and to accompany himself on the lyre, and the ladies in their rooms amused themselves with singing and playing the lyre, while their oriental slave girls would strum the eastern harp.

THE GREEKS stressed vocal music at the cost of instrumental music in all these activities, and not only because they belonged to antiquity and to the eastern Mediterranean. As a basically classical-minded nation, they expected from their arts a distinctness and unequivocal character that only words could convey to music. Hence Plato, the arch-classicist, haughtily asked what, after all, a melody and a rhythm could mean unless there was a text. Which was exactly the famous question

of the French: *Sonate, que me veux-tu?* (Sonata, what do you want of me?) Instrumental music meant so little that the instruments—lyres and pipes—were left in an astonishingly primitive stage. Not before postclassical times, after the Golden Age of Perikles, were the instruments improved and was an independent instrumental art encouraged. This sequence is in keeping with the general laws of evolution: instrumental music with its vaguer meaning has come to the fore in all postclassical phases.

Since harmony did not exist and counterpoint was accessory, Greek music was essentially melody and rhythm; that is, an orderly succession of notes and time-values. Either one of these depended on the laws of poetry. Poetic meters, anapaests and dactyls, iambs and trochees, were so exactly rendered that composers hardly ever cared to write the symbols that notation provided for rhythm, and the sequence of notes paid attention to the natural inflection of the Greek language, rising on an acute accent and, with less consistency, rising or falling on a grave or a circumflex.

However, it is important to know that, of necessity, all our descriptions of Grecian melodies imply a certain oversimplification. Music, almost exclusively focused on singing, had none of the clear-cut tempered scales that instrumental music wants and foments. Actually, the theorists, sandwiched between the need of the scientists for logical rule and the freedom of intonation that the singers demanded, followed two opposite trains of thought: The school of Aristóxenos (fourth century B.C.) left the supreme judgment to the ear, while the school of Ptolemaios (second century A.D.) submitted to the rule of simple mathematical ratios.

As a consequence, the Greeks had officially no less than eight different sizes of thirds, seven wholetones, thirteen semitones, and nine quartertones or, better, microtones. Unofficially, every singer or player did as he deemed best. Moreover, Greek musicians felt free, in linking two tetrachords to form a heptad or an octave, to 'shade' either one in a different way. Such con-

fusing plenty of theoretical shades was not meant to be sophistication, it was an attempt to avert chaos and anarchy by legalizing the principal current trends.

The role of musical theory was indeed preëminent. Philosophers, scientists, mathematicians, and historians made their contributions. Music itself and the psychology and physiology of sound perception were frequent themes of scholarly search and reasoning. And so was acoustics, the physical aspect of music. Vibrations were discovered to be the cause of sound, and there is little doubt that the discoverer was Lasos of Hermione, who, around 500 B.C., was Pindar's teacher. A hundred years later, Archytas of Tarentum found that hearing even implied two kinds of vibrations: stationary waves within the instruments and the throat, and progressive, spheric waves in the surrounding air to convey them to the ears. And the fourth century B.C. established a complete (though not fully preserved) theory of rhythm and melody under the leadership of Aristotle's disciple, Aristóxenos of Tarentum.

This theory has been the weightiest heritage left by ancient music. The melodies of Greece have faded away, but all the musical treatises of the Islamic Orient—Arabian, Persian, Turkish—are based on the system of Greece. And so are the musical treatises of the western Middle Ages. The medieval theory of interval ratios with the string-dividing monochord as the measuring device, the eight Byzantine *echoi*, the eight western Church modes, the neumes, and the letters of the alphabet as the names of notes—all these and many other subjects were taken from the Greeks. It was Hellenic antiquity and hardly anything but Hellenic antiquity that allowed the learned monks of medieval Europe to lay the fundamentals of western music.

RELICS. Only eleven pieces, or fragments of pieces, of Greek music have been preserved, either on stone or on papyrus. Those in best condition are:

Two hymns addressed to Apollo, from the middle of the second century B.C., engraved in stone on the treasury of the Athenians at Delphi.

A short *skolion*, or drinking song, on the inconstancy of life by a certain Seíkilos (Sicilian), from the second or first century B.C., engraved on a tomb stele at Tralles in Asia Minor.

Three solemn hymns by Mesomedes, to Helios, to Nemesis, to the Muse, from the second century A.D.

Pindar's first Pythian ode, however, though printed by preference in many handbooks, is today considered a forgery.

It is remarkable that among eleven pieces only one is instrumental. And the few measures of which it consists seem to be an etude for the lyre rather than an actual composition.

From these eleven relics and from the scattered evidences of theory, we piece together the elements of Greek composition.

MELODY, GENDERS, MODES. The unit of Greek melody was the tetrachord (from Greek *tetra* 'four'), that is, an organized group of three or four notes in the span of a fourth, say C A G or C B A G. In any such group, the two bounding notes—here C and G—had a stronger melodic emphasis (and correctness) than the filling notes.

To form a higher unit, two tetrachords could be connected, either by conjunction or by disjunction. In the case of conjunction, the lowest note of the higher tetrachord was at once the highest note of the lower tetrachord, and the whole formed a 'heptad,' or group of seven. In the case of disjunction, the two tetrachords followed at the distance of a tone without a common note and formed a group of eight, or an octave (*cf.* page 12). With the growing conception of the octave as a normal span, the older heptads were often supplemented by an additional tone above or below, the *proslambanómenos*.

The inner organization of the tetrachord decided the gender and mode.

A *gender* provided the sizes of steps within the tetrachord, notwithstanding their sequence. There was:

(1) A *diatonic*, or *heptatonic*, gender of two tones and one semitone (as in our modern system).

(2) A *pentatonic* gender of a minor third and a tone, which later was split into two semitones and thus produced the so-called *chromatic* gender.

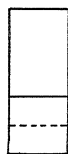
(3) A *pentatonic* gender of a major third and a semitone, called the *enharmonic* gender (which must not be mistaken for the entirely different modern conception of the same name). The semitone of this gender was later split into two microtones (not exactly quartertones).

The following graph will give an idea of these three genders:

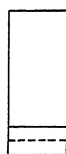
DIATONIC



CHROMATIC

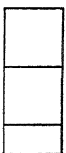


ENHARMONIC

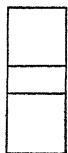


The *modes* provided the order of these steps, particularly in the diatonic gender. The Dorian tetrachord had the semitone at the bottom, the Phrygian in the middle between the two tones, and the Lydian on top.

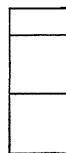
DORIAN



PHRYGIAN



LYDIAN



There is little doubt that the enharmonic gender, which had its closest relatives in Japan, India, and Egypt, was the earliest in Greece. It became diatonic and Dorian when, at a time unknown, it accepted a filling note within its major third—exactly as the similar Japanese scale developed to the diatonic

zoku-gaku. In an analogous way, the chromatic gender seems to have begotten the diatonic Lydian and Phrygian modes.

The actual number of Grecian scales is not exhausted with the enumeration of the three genders and the three tetrachords. To judge from the little that we know, they must have been a confusing group; some were 'tense' and others 'relaxed,' some disjunct and others conjunct, some pure and others mixed, some plagal (with the fifth on top) and others authentic (with the fourth on top), some denoted structures and others keys, which would follow each other now in a diatonic sequence (that is, a tone or a semitone apart), now at a distance of three-quarter tones—just to mention a few of the dizzying possibilities.

At last, in postclassical times, the Greek musicians radically simplified, clipped, and normalized such luxuriant growth. Ignoring subtle differences in the structure of modes, they squeezed seven of them into a unifying framework, which they called the Perfect System and first described in the fourth century B.C. Its diagram is on the following page.

To understand and interpret the Perfect System, a few essential facts must be realized.

(1) Greek melodies and Greek instruments rarely exceeded the range of one octave.

(2) The modes had to show within this central octave, and could do so only by the sharpening or flatting of some of its seven notes (as we moderns would change the C major key into C minor by flatting *E*, *A*, and *B*).

(3) But the Greeks had names for only seven notes in the octave (like our current *do-re-mi* solmisation). They had no means to indicate any sharps or flats.

(4) As a consequence, the Greeks could not avoid doing what we ourselves are forced to do in our 'movable *do*' solmisation: shift the *do-re-mi-fa* series up or down as a whole so that, whatever the absolute pitch might be, the group *mi-fa* would always fall on a semitone, be it *f♯-g*, *c♯-d*, or *g♯-a*.

(5) The shift of *mi-fa*, in our solmisation, implies a (tacit)

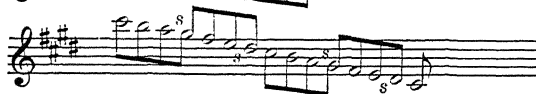
Mixolydian key:



“ mode:



Lydian key:



“ mode:



Phrygian key:



“ mode:



Dorian key:



“ mode:



Hypolydian key:



“ mode:



Hypophrygian key:



“ mode:



Hypodorian key:



“ mode:



s indicates the semitone

shift of *do*, *re*, and the other degrees of the scale. In other words, whoever transfers *mi-fa* from *c-f* to *f-g* cannot avoid calling *d* his new *do*, and *e*, his new *re*. In doing so, any mode that he establishes with the help of *mi-fa* appears as a section cut out of a transposed major scale.



(6) If you replace the modern series *do re mi fa sol la ti* by the seven Greek names (but in descending order) *nētē parā-nētē trítē paramésē mēsē lichanós parhypátē hypátē*, which the following graph represents as *n pn t pm m l ph h*, each Grecian mode must evidently appear as a Dorian standard scale (page 40). Key and mode are two aspects of the same phenomenon.

The reader who so far has followed our complicated explanation will readily understand the seemingly cryptic difference between the two conceptions *thesis* and *dýnamis*, which has caused much headache to generations of scholars. A note, says the Greek, can be *mésē* by *thesis*, and *lichanós* by *dýnamis*. What does this mean? Once more, our modern solmization will help to comprehend this double name and meaning. In C major, C is *do* and D is *re*. But in all the other keys, the notes have two names according to whether you apply the 'fixed *do*' or the 'movable *do*' solmisation. In D major, G is *sol*

| | | | | | | | | | | |
|---------------|------------------------|-------------------------|--------------------|-------------------------|--------------------------|----------------------------|-------------------------|-------------------------|-----------------------|---------------------------------|
| Mixolydian: | A <i>n</i> | G <i>pn</i> | F E <i>t pm</i> | D <i>m</i> | C <i>l</i> | B \flat A <i>ph h</i> | <i>g</i> | <i>f</i> | <i>e</i> | |
| Lydian: | G \sharp <i>n</i> | F \sharp <i>pn</i> | E <i>t</i> | D \sharp <i>pm</i> | C \sharp <i>m</i> | B <i>l</i> | A <i>ph</i> | G \sharp <i>h</i> | f \sharp <i>e</i> | |
| Phrygian: | | F \sharp <i>n</i> | E <i>pn</i> | D <i>t</i> | C \sharp <i>pm</i> | B <i>m</i> | A <i>l</i> | G <i>ph</i> | F \sharp <i>h e</i> | |
| Dorian: | | | E <i>n</i> | D <i>pn</i> | C B <i>t pm</i> | A <i>m</i> | G <i>l</i> | F E <i>ph h</i> | | |
| Hypolydian: | | | <i>e</i> | D \sharp <i>n</i> | C \sharp <i>pn</i> | B <i>t</i> | A \sharp <i>pm</i> | G \sharp <i>m</i> | F \sharp <i>l</i> | E D \sharp <i>ph h</i> |
| Hypophrygian: | | | <i>e</i> | | d C \sharp <i>n</i> | B <i>pn</i> | A <i>t</i> | G \sharp <i>pm</i> | F \sharp <i>m</i> | E D C \sharp <i>l ph h</i> |
| Hypodorian: | | | <i>e</i> | | d c B <i>n</i> | A <i>pn</i> | G <i>t</i> | F \sharp <i>pm</i> | E <i>m</i> | D C B <i>l ph h</i> |

n — nete
 pn — paranete
 t — trite
 pm — paramese

m — mese
 l — lichanos
 ph — parhypate
 h — hypate

n — nete
pn — paranete
t — trite
pm — paramese
m — mese
l — lichanós
ph — parhypate
h — hypate

in the 'fixed do' system but *fa* in the 'movable do' system. The Greeks would have said: *G* is *sol* by *thesis*, and *fa* by *dýnamis*. Indeed, the Dorian scale would behave like our *C* major: its notes stand like fixed stars around the immutable *mésē* or solar center of the musical space. The notes of all the other scales obey a twofold orientation. In Phrygian, for instance. *A* is *mésē* by *thesis*, that is, by its immutable 'station' in space, but it is *lichanós* by *dýnamis*, or by its relative, functional position within its scale.

POLYPHONY. The question of whether or not the music of Greece had any element beyond a mere melodic line has been the topic of hotter arguments than the temperate atmosphere of scholarly research would seem to admit. There were, of course, no fugues in Greece, nor was there harmony in the sense of four-part setting with sixth and seventh chords

on a figured bass. Not these nor other naive conceptions of western Europe two thousand and more years after the bloom of Hellenic music must lead our deductions, but rather the much closer conceptions of the ancient eastern world (of which the pugnacious pro and contra authors had no knowledge).

Although there was never part-singing in Greece except in the natural parallel octaves imposed by the natural ranges of boys' and women's voices, we can today not doubt that instrumental accompaniment availed itself of several forms of independence.

(1) Octaves, fifths, and fourths were considered consonant; thirds and seconds, sixths and sevenths, dissonant.

(2) The existence of parallel fifths or fourths cannot be proved, but is quite possible.








(3) It can be proved, however, that the Greeks, both in early and late times, preferred two-part setting to unaccompanied melodies. A certain author, probably of the first century A.D. and wrongly called Longinus, even states that melodies were "usually" sweetened by fifths and fourths.

(4) Two passages five hundred years apart, in Plato and in Athenaios, hint at an actual two-part counterpoint, of which, to be sure, we do not know the rules. Plato mentions inadequate music teachers who, playing with pupils only twelve years old, would "answer closer by wider steps, lower by higher notes, and faster by slower notes"; and Athenaios admonishes two pipers to keep their voice parts clear apart without confusing the listener.

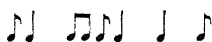
RHYTHM. The Greeks had mainly a metrical, 'quantitative' rhythm, in music as well as in poetry. It showed in the contrast of long and short, not of strong and weak. A dactyl, for example, was not thought of as strong-weak-weak but as long-short-short, and an iamb as short-long. A verse foot, or

single metrical pattern, had two beats, an *arsis* ('lifting') or upbeat and a *thesis* ('setting down') or downbeat, whether it consisted of two, three, or five time-units. *Arsis* and *thesis* were of equal length in an anapaest, with the two shorts on one beat and the long on a second beat. *Arsis* and *thesis* were of unequal length in an iamb, with the short on one beat and the long on a second beat. In every case, the short, in our transliteration represented by an eighthnote, is the indivisible *chronos prōtos* or 'first time,' that is, time-unit.

The principal meters were:

| | | | |
|----------|---|-----------------|---|
| pyrrhic |  | spondee |  |
| iamb |  | trochee |  |
| anapaest |  | dactyl |  |
| | | paíón or cretic |  |

These simple meters could easily be combined to form some larger pattern. The combination of two different meters was called a dipody; of three, a tripod; of four, a tetrapody. One tetrapody, described as a processional rhythm, was:



or iamb-pyrrhic-iamb-trochee. The second movement of Beethoven's Seventh Symphony gives an idea of dactyl-spondee dipodies; its consistent metrical pattern is long-short-short-long-long.

INSTRUMENTS. The Greeks, like the Etruscans and the Romans, had two main types of instruments: lyres and pipes.

The lyres were of several forms, all of which had, instead of a neck, the characteristic yoke of two diverging arms with, on top, a crossbar from which the strings stretched down between the two arms and along the front of the box. The two ground

forms were distinguished as the *kithara* and the *lyra*. (Keep the specific Greek term *lyra* and the generic English term *lyre* apart!) The *kithara*, a professional's instrument, was solidly, sumptuously joined and held upright before the left side of the player's chest (plate I). The *lyra*, on the contrary, an instrument of beginners and mere amateurs, was loosely assembled from a few rods and a skin-covered tortoise shell and appears always in an inclined position (illustration in the author's *History of Musical Instruments*, page 128).

While the Homeric lyres, the *phorminx* and the *kitharis*, seem to have had only three or four strings (on which the ancient enharmonic melodies could be easily played), the classical *kithara* and *lyra* had, as a rule, five or seven strings, indeed the former of the two had in later times nine and even eleven strings.

For solo performances, the *kithara* could be played with the bare fingers of the two hands, like a harp. But singing was accompanied, on either instrument, in a very peculiar manner, which, incidentally, has been preserved to this day in far-away Nubia, on the Upper Nile. From the rear, the outstretched fingers of the left hand deadened all the strings but one at a time, while the right hand, armed with a heavy *plektron*, or plucker, scratched across the bunch of strings all at once and thus produced the only note not deadened by the left hand.

Harps (to be held on the lap) were rare and seem to have been played chiefly by oriental slave girls.

MOST PIPES OF ANTIQUITY—called *aulós* (plur. *aulói*) in Greek and *tibia* (plur. *tibiae*) in Latin—were exciting oboes, not, as a careless translation implies, mild and soothing flutes. They were invariably made in pairs. The player had both reeds in his mouth, and held and fingered, one hand to each, the two slender tubes, which diverged like an upside-down letter V (plate I). As far as we can see, one tube played

the melody, and the other, a sustained pedal note; that is, they acted as the chanter and the drone of what amounted to a Scotch bagpipe. The comparison is completed by the tight-fitting bandage around the cheeks of the piper, which shows that the Greeks, like oriental pipers, used the inflated mouth as a windbag to feed the two pipes independently of respiration and to hold the tone indefinitely.

We do not know exactly how the pipes coöperated with the voices. From a number of passages in contemporary writings, however, we can safely conclude that they accompanied: (1) in preludes, interludes, and postludes; (2) in occasional consonances, as octaves, fifths, and fourths, though not in thirds; (3) in free counterpoint, maybe of the heterophonic kind.

Flutes, in the actual meaning of the word, were rare and unimportant. A transverse flute in modern form was known at least in Etruria in the second century B.C., but so far, we find it depicted on only one relief. The panpipes or *syrix*—a raft-like bundle of one-note flutes so often claimed as a characteristic instrument of the Greeks—was merely a shepherd's instrument, and apparently a late one.

Percussion took little part in orthodox music. Circular frame drums, cymbals, and clappers (plate I) were on the whole confined to rites and dances of oriental descent, such as the ecstatic worship of the seasonal god Dionysos and the mystic cults of the Earth.

NOTATION. The Greeks had two notations of a peculiar, indeed, unparalleled kind. One of them was called the Vocal Notation and consisted of the letters of the alphabet in descending order (the first letters belonging to the highest notes), and was later expanded upward beyond *alpha* and downward beyond *omega* by additional symbols. However, instead of following the scale—*alpha* for the first, *beta* for the

second, *gamma* for the third note—the symbols were grouped in triads, each consecutive three belonging to one string of the lyre: *alpha beta gamma delta epsilon zeta* and so on (diagrams in the author's *Rise of Music*, pages 304, 305). All the third letters, such as *gamma* and *zeta*, denoted one of the open strings of the lyre; the second ones, as *beta* and *epsilon*, indicated the same strings stopped near their upper ends by the index finger to sharp the original notes (usually by a semitone); and the first ones, as *alpha* and *delta*, once more the same strings stopped by the middle finger, which had to be used whenever the index was already busy.

The older Instrumental Notation followed the same triadic principle. But the scale ran upwards (as do all instrumental scales). The letters were taken from an archaic, Semitic alphabet, and they were distributed in sequence, so that all of them denoted open strings, while their flatted, prone position prescribed the stopping index, and their reversed position, the stopping middle finger.



Both the Greek notations, thus, were 'tablatures,' or fingering scripts, not pitch notations. This seems illogical in the case of a vocal script, since the voice had apparently nothing to do with strings and fingering. Actually, the singer was expected to accompany himself on the lyre, and his notation was correctly the singer's instrumental notation.

Although the Greeks had an open-string symbol for each of the seven notes of the octave, they never used all of them at a time. Instead, they would represent, say, the semitone *E-F* as *E-E#*, and the semitone *B-C* as *B-B#*. This awkward spelling proves that the lyre had only five, not seven, strings per octave and that any additional strings did not make it hepta-

tonic but continued the pentatonic series above and below. The lyre was a pentatonic instrument without semitonal distances, and the player had to stop the missing notes of his heptatonic melodies on the lower string: *C* on the *B*, and *F* on the *E* string.

Why then the open-string symbols for *C* and *F*? Because the lyre had three different (pentatonic) tunings, selected according to the tonalities in which it had to perform: (1) *e g a b d'*, or (2) *e g a c' d'*, or (3) *f g a c' d'*, two of which required a *C*, and one an *F* string.

A HISTORY OF MUSIC in Greece cannot be written unless additional material is found. But certain facts allow us to sketch a picture of changes, which show that there was no quiescence in taste, ideas, and forms of expression, and also that the musical changes, as far as we know them, coincided with similar changes in the other arts.

We may confidently neglect the general statements of various writers from all the periods of antiquity who glorify the noble simplicity and dignity of the music of yore without exactly telling us what olden time they had in mind. But there are some better reports, too. We hear that the seventh century B.C., with Terpander and Archilochos in the lead, was epochal in complicating both the meters in melody and the accompaniment on the lyre; that in 596 B.C., in a time when vase painters were turning to a realistic, narrative style, the piper Sakadas won a brilliant victory in the Pythian games with an amazing piece of program music, in which he represented, on a single pair of pipes, Apollo's fight with the dragon; that the ecstatic dithyrambs in honor of the god Dionysos, which up to the sixth century had been considered as something different from music proper, were then being made a part of recognized music and even imposed upon Athenian contests.

Of the Golden Age in the times of Perikles, we know hardly more than that from Aischylos to Euripides, from the first to the second half of the fifth century B.C., the meters of choral songs in tragedy became increasingly complicated.

But towards the end of the Periklean time, late in the fifth century, an open revolution broke out. In one of his comedies, which were mainly satires of up-to-date matters and current events, the Attic poet Pherekrates (fl. c. 430 B.C.) had Music enter the stage in rags as a downtrodden woman and whimper that once she had been respected, but that the modern composers, ignorant of the dignity of old and the beauty of melody, had badly dishonored and abused her.

The leaders of the maligned new school were two non-European Greeks, Phrynis of Mytilene and his disciple Timotheos, "the redhead" of Miletos. Alas, no relics convey an idea of these personalities and their revolutionary style.

We have a bit more luck in the time around 150 B.C., when the fine arts tried to revert to archaic styles. Two preserved musical pieces of some extent, the Delphian hymns to Apollo, illustrate the musical contribution to this reactionary archaism in their half-forgotten enharmonic heptads in the older style with major thirds and uncleft semitones and an apparently outmoded five-beat meter.

We have no clear idea of the ending phase of Hellenic music shortly before and during A.D. But it seems that in Greece—as apparently everywhere—the original plenitude of modes was more and more reduced, in number and importance; that the diatonic gender was given exclusive rights, except when wilful archaism revived the ancient enharmonic gender; and that a purely instrumental music was allowed, more than before, to come to the van.

This also seems to be true of the music of Rome. As early as in times B.C., the Romans expressly accepted Hellenic music—the *ritus Graecus*—and founded a Society of Greek Singers. But above all, they accepted the theoretical system of Greece and its later developments. They have also been commended for

the introduction of various military trumpets and horns, the *cornu*, the *lituus*, and the *tuba*.

But this can hardly be the whole truth. The Roman Empire, as a supranational organism, is not thinkable without a continuous influx and exchange of foreign musical styles from western and northern Europe, from Asia, and from Africa. Archaic trends in the older layers of today's Italian folksong hint at an Italian, non-Greek heritage, be it Etruscan or otherwise, and the chant of the Catholic Church, grown in Roman times on Italian soil, must hold Italian elements. We do not know the ancient musical language of Italy. But we must not allow the Greek terminology in which the Roman theorists explained the music they heard to deceive us. The idea that the incomparably gifted peoples of Italy availed themselves of the decaying music of Greece for five hundred years without any positive contribution of their own is absurd.

READING: Curt Sachs, *The Rise of Music in the Ancient World*, New York, 1943; Section V. Curt Sachs, *World History of the Dance*, New York, 1937; pp. 237 ff. Curt Sachs, *The History of Musical Instruments*, New York, 1940; Chapter 6. Curt Sachs, *The Commonwealth of Art*, New York, 1946; Chapter Two.

LISTENING: 2000 Y 1 (Skolion and Hymn to the Sun).

4

THE EARLY MIDDLE AGES

UP TO A.D. 1000

A VITAL JEWISH HERITAGE in early Christian music has in the past few decades become so evident that the scholarly world is inclined to see the principal sources of Catholic music in the cantillation of the Synagogue.

The first three facts to capture the attention are: that the earliest Christian congregations developed within the Synagogue; that they kept the Jewish cantor as their *psalmista*; and that the early liturgy of the Christians, which also took over the thrice Holy, *Kadosh Kadosh Kadosh*, as the *Sanctus Sanctus Sanctus*, and the Benediction or Graces, *Baruh atā Adonaj*, as the *Gratias agimus tibi, Domine*, lived mainly on Jewish psalms. To this day, the so-called psalm tones of the Church, that is, the melodic formulas on which the psalms are chanted, have the closest parallels in the liturgy of oriental Jews.

Moreover, the late Abraham Z. Idelsohn, who had for many years been a cantor in Jerusalem before he became a professor at the Hebrew Union College in Cincinnati, was able to show that a good number of Catholic melodies exist in the liturgy of those oriental Jews who had lost contact with the Palestinian homeland after the Babylonian Exile (597 B.C.) and, living in pagan (later Muhammedan) surroundings, were never in touch with Christian communities.

Another traceable source of Christian melody was Greek. Of the eleven relics of Hellenic music mentioned in the preceding chapter, one, from Oxyrhynchos in Egypt, written on papyrus

in the third century A.D., is in itself a Christian hymn. Of the other ten melodies, no less than three are claimed to have been converted into Catholic tunes: the delightful *Skolion* of Seikilos into the Palm Sunday antiphon *Hosanna filio David*; the Hymn to the Sun by Mesomedes into an *Alleluia* jubilus; and the Hymn to Nemesis, also by Mesomedes, into a *Kyrie rex genitor*.

But this claim is misleading. The very fact that no less than three out of ten preserved melodies show a close relationship to later Christian melodies is against all laws of probability. Such coincidence could be acceptable only if Greece—which after all boasted of the eastern origin of her music—had herself the oriental concept of those melodic patterns that the Hindus call *rāgas* and the Arabs, *maqamāt* (cf. page 21). This would mean that there was not just one individual *Skolion*, composed by Seikilos, or one Hymn to the Sun, composed by Mesomedes, but many similar melodies, in which the personal contribution of the composer was limited to minor details without affecting the general line of the pattern.

Actually, no modern music historian admits a decisive influence of Greek on Christian music.

However, it cannot be doubted that important contributions came from Greece or, for that matter, from other gentile countries. Even in the earliest time of Christendom, the apostolic mission among the pagans must necessarily have opened the Jewish-born liturgy to gentile influences; the newly converted heathen, in Egypt, Palestine, Syria, Asia Minor, Greece, and Italy, must at least have provided their national manners of singing, if not actual melodies of their own.

This must have been the case particularly in the improvisations, which were a recognized privilege granted to the cantors and also to certain laymen who had the gift of praising God in sudden inspiration. Enthusiastic improvisations, to be sure, could not create a new and Christian musical style; they were

adaptations of melody patterns from their native environment. Whoever has witnessed such outbursts in the Holy Week at Seville in our own days must realize that the rapt *sacettas* which then spring up in the streets before the sacred images, are truly Andalusian, and nothing else.

Such absorption of nobody knows how many national styles in one homogeneous Catholic style was only possible because the countries around the eastern Mediterranean had musical idioms that, in all their diversity, were comparatively close to each other. True, we do not know much of the tunes once sung all over that enormous area. But in return, we have one testimony that rarely deceives—the instruments. There are the significant double-oboes, in use from Persia to Egypt and Rome. And there is, as the second common instrument of that province, the lyre, which the Nubians on the upper Nile still play in the curious fashion that the Greeks had some thousand years ago. Of vocal music, we know one fact of particular significance for early Christian music: antiphonal singing in two responding choruses was practised all the way between Mesopotamia and Libya on the African coast.

Of paramount interest, from this viewpoint, is the report of the Greek historian Herodotos in the fifth century B.C. that “the Egyptians have, with other curious pieces, a certain melody, which is also sung in Phoenicia, Cyprus, and elsewhere, but differently named in each of these countries. It is quite similar to the tune that the Greeks have known under the name of *Linos*. I wonder whence they got the *Linos* song, as I wonder about so many things in Egypt. For it seems to me that it has been in use from the oldest times.”

The common musical language of the eastern Mediterranean widens the soil from which the early Christian song could draw its sap. Growth and final unification, however, can hardly be thought of without the specifically Roman, Italian dialect of this common language.

ALL ANCIENT CHRISTIAN MUSIC was vocal. "We need one instrument: the peaceful word of adoration, not harps or drums or pipes or trumpets," said St. Clement of Alexandria around 200 A.D.

This peaceful word of adoration has been performed by officiating priests, by professional solo singers or cantores, by the choir or *schola*, and by the congregation. Women, originally admitted, were excluded from the choirs in A.D. 578, except, of course, in convents.

All liturgical singing of the Catholic Church has been known under the names of *chant*, *chorale*, and *plain-song*, whatever its form or style.

Two basic types appear from the very beginning: *accentus* and *concentus*. The former term denotes the monotonous psalmody of the priest; *concentus*, on the contrary, is the freer melody of the choir and the soloists. Both can be 'direct,' that is, all choir or all solo, or else 'antiphonal' or 'responsorial.' In the (true) antiphony, two half-choruses alternate; in the responses, an answering chorus—usually the congregation—interrupts the priest or the soloist. However, the so-called *antiphon* in the liturgy has greatly lost the antiphonal, alternating character and is 'direct.'

The musical liturgy of the Catholic Church consists of Masses and Offices.

The Mass, as the central ceremony, is the celebration of the eucharist, that is, the Sacrament of the Body and the Blood of Christ. Its words took centuries to develop, and its music, a thousand years. Since it was still incomplete in the tenth century, it will be described in the following chapter.

Offices, or Canonical Hours, are held eight times a day under the names of (1) Matins, (2) Lauds, (3) Prime, (4) Terce, (5) Sext, (6) None, (7) Vespers, and (8) Complin(e).

Three main forms to be sung in the Offices are psalmody, Magnificat, and hymns.

A complete psalm is preceded by a choral antiphon. The psalm itself is recited by the priest according to one of the eight 'psalm-tones,' which, complying with one of the eight Church modes each (cf. below), provide for every double-verse of the text a similar melody: an ascending initial, a middle, a descending final formula of a few notes each, and between them only one monotonous, ever-repeated note, the *tenor* or *tuba*. When the priest has recited all the verses of a psalm, the chorus repeats the antiphon. In the interest of coherence, the end of the psalm is expected to prepare the re-entry of the choral part. To this end, most of the eight psalm-tones have a number of exchangeable concluding formulas or *differentiae*. The prayer books omit the psalm of the priest and print the framing antiphon only once. But they add the appropriate *differentia* with the baffling text *euouae*. This cryptic symbol is taken from the last words of the Minor Confession of Faith, *Gloria patri et filio . . . sEcUIOrUm AmEn*, which concludes every psalm in the Catholic liturgy (plate V).

The Magnificat, one of the so-called canticles, is Mary's praise of God when she learns that Jesus will be born from her womb: *Magnificat ánima méa Dóminum*—My soul doth magnify the Lord, and my spirit hath rejoiced in God my Savior (St. Luke 1:46-55). It is sung at Vespers in a psalmodic style by alternating choruses in true antiphony.

Hymns in praise of God are, on the contrary, freely invented, not taken from the Scriptures. They also differ in their strictly metrical and almost catchy form. Most of them follow the simple, popular pattern of four trochees or iambs, such as *Crúx fidélis ínter ómnes* or *Deús créátor ómniúm*. If we interpret Saint Augustin correctly, the earliest hymns were in triple time, with two time-units to the long, and one time-unit to the shorter syllables; they were 'quantitative' (cf. pages 22 f).

One of the best-known hymns, *Te Deum laudamus* (Thee God we praise), or shortly *Tedeum*, has generally been attributed to Saint Ambrose (333-397), bishop of Milan, but was not by him. The fact is true, however, that the Church is

debted to him for introducing the oriental hymn to theurgy as an entirely novel feature.

Although the hymns have been kept, that part of the *Ambrosian Chant* which takes its texts from the Scriptures has lasted only in the cathedral of Milan. In the rest of the world, its florid, exuberant cantillation has yielded to the less oriental *Gregorian Chant*, called for Saint Gregory I, the Great, Pope of Rome from 590 to 604. Gregory is no longer credited with composing melodies himself, but he certainly was the energetic organiser and world-wide unifier of the liturgical melodies.

If the Gregorian version was able to conquer its rival versions, the Ambrosian chant in Milan, the Gallican in France, and the Mozarabic in Spain, it was unable to keep its own tradition. Under the impact of polyphony, which demanded a mutual adaptation of the concurring voice parts, a rhythmical distortion of the original melodies was unavoidable, and notation, designed to keep the holy tunes intact despite the influences of time and place, was much too vague for such a responsible task.

NOTATION in the early Middle Ages was, from the ninth century on, preponderantly 'neumatic' (from Greek *neuma*, 'nod'). It depicted, in characteristic dots and dashes, hooks and flourishes, the essential melodic steps and combinations of steps that formed a melody, as:

| | |
|------------------------------|-------------|
| <i>punctum</i> | single note |
| <i>virga</i> | single note |
| <i>pes</i> or <i>podatus</i> | up |
| <i>scándicus</i> | up-up |
| <i>clivis</i> | down |
| <i>clímacus</i> | down-down |
| <i>tórculus</i> | up-down |
| <i>porrectus</i> | down-up |
| <i>scándicus flexus</i> | up-up-down |

| | |
|---------------------------|--------------------|
| <i>porrectus flexus</i> | down-up-down |
| <i>tórculus resupinus</i> | up-down-up |
| <i>pes sub punctis</i> | up-down-down, etc. |

There also were neumes to indicate *tremolo* and other manners of singing (e.g., *quilisma*). Plate II shows neumes above the syllables of the text in a gradual of the twelfth century.

The weak point of the neumatic script was its inability to mark individual pitches or time-values. A *scándicus* would indicate that two upward steps were required, but would not say on what note the singer had to start, how large the steps should be, and how long the three individual notes were. The neumes, therefore, were useless except for vocal music, in which the pitches were regulated by tradition while the rhythm was oratorical, without meter or time.

However, the tempo and even the intensity were for a time denoted in the so-called Romanian letters, allegedly of the eighth century, with, for example, *b* standing for *bene* or much, *c* for *celériter* or quickly, *e* for *expectare* or hesitate, *f* for *frangere* or fortissimo.

Later, in the tenth century, the south of Europe began to space the neumes, that is, to place them in the modern way at different heights according to their pitches. Indeed, the end of the century prepared the way for the later staff by introducing one single red reference line for *f*, which left the other notes at some undetermined distance above or below.

While the distances from note to note thus became increasingly certain in later manuscripts, the time values—long and short—were left as doubtful as ever. As a consequence, the rhythm of Gregorian melodies is still an open question and has been the object of bitter controversy. The victorious interpretation, today compulsory in all churches, is the one of the Benedictines in the French monastery of Solesmes. It gives in principle the value of one eighth-note to every single symbol, but allows the voice to dwell on accented syllables and to stretch the final notes of a phrase or ‘distinction,’ right before the vertical dash or *divisio* that serves as a caesura.

CHURCH MODES. The Gregorian Chant or plainsong, derived from oriental and Mediterranean melodies, is inevitably based on their characteristic 'modal' principle. Every melody is expected to comply with a certain form of the octave—a Church or ecclesiastical mode—which differs from all the other Church modes in the arrangement of the five tones and the two semitones. In the first mode, conveniently represented as the (white-key) octave on *D*, the semitone (*E–F*) occurs in the second place; in the third mode, represented as the octave on *E*, the same semitone occurs in the first place. A clarifying diagram will show how this works.



Four of the eight Church modes, the odd-numbered first, third, fifth, and seventh, are called *authentic*; the other four, the even-numbered second, fourth, sixth, and eighth, are called *plagal*. Authentic, like modern, octaves 'stand' on the lowest note or *finalis* and hinge on the fifth or *confinalis* (only the third mode has its confinal on the sixth, in order to avoid the dreaded whole-tone series or tritone *F-G-A-B*). The four plagal modes have the opposite structure: they are a fourth lower than the corresponding authentic modes but 'hang' from the final, which is common to both groups. Each plagal mode, however, has a confinal of its own, independent of the confinal of the corresponding authentic mode (cf. diagram).

All Church modes are thought of and represented as white-key scales without sharps or flats. Still, two cases of a special nature ask for a flatted B.

One of them occurs in the first mode, on *D*, where for reasons of natural singing any *B* leading down to *A* must be flatted. The old Latin rule reads:

*Una nota super la
Semper est canendum fa.*

Which in English might be:

Single notes on top of *la*
Always must be sung as *fa*.

The syllable *fa*, as the following section will show, forms a semitone with its lower neighbor wherever it stands.

The other case occurs in the fifth mode, on *F*, where again the *B* is left natural when it leads upwards, but is flatted when it leads downwards (cf. AS 34).

The notes, and therewith the ranges, of the Church melodies are purely relative, not representing absolute pitches. In the first place, the homophonic, one-voice character of the chant makes any definite pitch unnecessary; in the second place, the different ranges of priests, of cantors and choruses, of boys and men and nuns make any definite pitch impossible; and in

the third place the conception of absolute pitch was unknown in the Middle Ages. The Dominican Jerome of Moravia (thirteenth century) expressly wanted everybody to sing at a medium pitch, since getting too low meant ululation and getting too high meant screaming. Besides, even before A.D. 1000, the liturgy asked for a pitch higher on certain occasions than on others.

There is a final point to discuss. From the tenth century on, some scholarly monks compared the Church modes to the modes of the ancient Greeks and gave them the following names, which, though little used in the Church, are to this day alive in the language of counterpoint students:

| | | | |
|----------|------------|---------|----------------|
| First: | Dorian | Second: | Hypodorian |
| Third: | Phrygian | Fourth: | Hypophrygian |
| Fifth: | Lydian | Sixth: | Hypolydian |
| Seventh: | Mixolydian | Eighth: | Hypomixolydian |

Unfortunately, the labels were misplaced. The first mode, on D, is related to Phrygian, not to Dorian; and the third mode, the other way around, to Dorian, not to Phrygian. The medieval monks understood all right that Hypodorian had had the lowest and Mixolydian the highest place in the system. But they did not understand that the Grecian scales had been higher or lower only *qua* transpositions of the standard scales, such transposition showing only within the untransposed central octave as a mode (*cf.* pages 38 ff). They misunderstood it so much the more as they themselves had neither sharps nor the conception of key. Owing to this misinterpretation, they shifted their scales and changed their modal arrangement.

TROPES AND SEQUENCES. Where the sacred texts depart from the grandeur of Biblical texts and liturgical formulas to establish a personal tie between the divine and man, the singer abandons the unemotional atmosphere of the plainsong and seeks a way out into the freedom

of inspired, subjective melody. Although the priests, anxious to protect the suprapersonal character of the service, have always restrained the autonomy of religious poets and singers, they gave way—both in the Christian and in the Jewish liturgy—in one episode of the cult. The cantor, intoning the *Alleluia* (from Hebrew *hallelujáh*, praise ye the Lord) was allowed to effuse his exaltation in free, enthusiastic melodies and to enrapture priest and congregation in his godly dithyramb.

This free coloratura style has often been called neumatic. The word should be correctly spelled pneumatic. It has nothing to do with *neuma*, 'sign,' but derives from *pneuma*, 'breath.'

The flowing alleluias that the Gregorian chant (AS 34) had taken from the Jewish liturgy, proved to be a precious but onerous heirloom. Products of a mature oriental art, the endless coloraturas on the one concluding vowel -a were entirely foreign to the voices, technique, and taste of Western and Central Europe.

As a consequence, the monks in Gallic and Germanic lands began to tamper with the traditional melodies in order to make them subservient to the domestic principle of syllabic singing—one syllable for each note. The first variation was to invent additional texts on which to sing the endless chains of notes. But this was only the beginning. Within a short time, the Gregorian alleluia melodies yielded to sharply outlined, rhythmical tunes of western cast, which were, on festive occasions, performed by powerful choirs of boys and men and often in solemn antiphony.

These pieces were called by an older name for the *Jubilus*: *sequentia*. Its usual written abbreviation *pro sã*, which means that the following passage should be sung in place of the *Jubilus* (*pro sequentia*), is said to be responsible for the second name of the sequence: *prosa*. But this rather unsatisfactory etymology is something less than certain.

The earliest sequences of which we know belong to the ninth century and appear to have had their home in French monasteries. From there, they were carried to the great

Benedictine abbeys on and near the Lake of Constance, St. Gall and the Reichenau. Particularly, one of the outstanding men of St. Gall, Brother Notker the Stammerer (c. 830–912), has been credited with composing sequences. But none of those connected with his name can actually be traced to him, and he himself claims only to have had a hand in writing texts.

The form of the sequence seems to stem from the Celtic lay, with which it shared the main principle of composition: that every two consecutive lines of the text follow the same melody, AA BB CC DD, and so on. This would be only natural. The French monasteries in which the sequence originated stood on ancient Celtic ground, the abbeys on the Lake of Constance had been founded by Irish monks, and the oldest known musician of St. Gall, Moengal or Marcellus (c. 860), had come from Ireland like Saint Gall himself. The Celtic theory does not contradict the opinion of the late Dr. Peter Wagner that the sequence was related to the form of Byzantine hymns. For the Irish monks were the chief apostles in the West of Byzantine lore and tradition.

Hundreds of sequences were written and sung in the centuries after A.D. 1000, but the Council of Trent (1545–1563) intervened with what seemed to the clergy to be an abuse, and allowed only five to be sung:

Dies irae (Day of wrath), composed in the thirteenth century, in the Mass for the Dead.

Lauda Sion Salvatore (Praise, O Zion, the Savior), on *Corpus Christi*.

Stabat Mater dolorosa (The dolorous mother stood), today ascribed to Saint Bonaventure (1221–1274) rather than to Jacopone da Todi, on Friday before Palm Sunday and on the third Sunday in September.

Veni Sancte Spiritus (Come Holy Ghost), on Pentecost.

Victimae paschalis laudes (Praise of the Easter victim), on Easter.

While the Council was lenient in the case of the sequences, it did away strictly with the tropes.

Tropes had the same principle as the sequence: syllabic texts were invented to carry ticklish melismatic passages. In several episodes of the liturgy, the text was so short that the melody, in way of compensation, distended every syllable in an elaborate melisma or coloratura. This antisyllabic attitude, again, presented often insurmountable difficulties to northern singers. As a consequence, they tried to make the melisma syllabic by the introduction of filling words. Good examples are the various appropriate expletives, such as *ineffabilis et interminabilis*, *immense et omnipotens*, that they added to the opening section of the Mass with its mere six syllables, *Kyrie eleison*.

Some of these tropes overpassed the goal, grew to considerable length and importance, and disrupted both the liturgical text and its melody. They became one of the most dangerous loopholes through which the trends and strains of secular music invaded the strict cantillation of Gregory. Indeed, as early a man as Notker's contemporary Tuotilo of St. Gall is reported to have accompanied the tropes—lo and behold—on a stringed instrument.

But there also were tropes which, more or less independent of the regular words and melodies of the liturgy, sprang from the urge to make a new contribution to the inherited stock.

Some of these latter tropes, written for Christmas or Easter in the form of question and answer assigned to different singers, led to the liturgical drama and eventually to the oratorio. At Winchester cathedral, for instance, the Easter trope *Quem quaeritis* (Whom are you seeking?) was, in the tenth century, actually staged: "While the third lesson is being chanted, let one of four brethren approach the sepulchre and sit there quietly with a palm in his hand. While the third respond is chanted, let three brethren follow and let them, stepping delicately as those who seek something, approach the sepulchre. These things are done in imitation of the angel sitting in the monument and the women with spices coming to anoint the body of Jesus. When he who sits beholds the three approach him, let him begin in a dulcet voice of medium pitch to sing

Quem quacritis. And when he has sung it to the end, let the three reply in unison *Ihesu Nazarenum . . .*" (Extracted from E. K. Chambers' translation of the original Latin text in his *Mediaeval Stage*. The whole passage is reprinted in Gustave Reese, *Music in the Middle Ages*, page 194 f.)

These liturgical dramas came to a peak much later in the Passion plays, when on four days of Easter week the tragic end of Christ was acted according to each of the Evangelists, one priest with a lower voice representing Jesus, another one, with a medium voice, the narrator, and a third, with a higher voice, the Jews. The three singers performed in plain cantillation without any accompaniment. Therefore, this kind of Passion is called choral or *plain-song* Passion, in contradistinction to the *polyphonic* Passion of the Later Ages.

BYZANTINE CHANT. A few words must be said on the liturgical singing in Byzantium, that is, in the eastern part of the Mediterranean, which Emperor Constantin the Great had united as an East Roman Empire in A.D. 330 with Constantinople (today Istambul) as the capital. The significance of this singing is that Byzantine music is the common ancestor of all the musical liturgies of the orthodox East-European Churches—Russian, Serbian, Bulgarian, Rumanian, and Greek.

Less than forty years after the erection of Constantinople, the Council of Laodicea (A.D. 367) prohibited the participation both of instruments and of congregations in the liturgy. Orthodox music has been purely vocal.

Chiefly modeled on Jewish patterns, the chant of the Eastern Church was similar to the cantillation of the Western Church and, in a similar way, found its melodic organization in *echos* (sing. *echos*), which, however, were melody patterns like the Arabian *maqamāt* rather than merely modal scales. But its texts

were Greek, independent of psalms or other scriptural poems, and shaped in metrical forms like hymns.

The types in which the chant appeared were first, in the fourth and fifth centuries, *troparia* (sing. *troparion*), or insets between the recitation of psalms, and, in the seventh century, *kontákia* (sing. *kontákion*), or lengthy odes consisting of a short proem and from twenty to thirty stanzas with refrains. In the eighth century, both the *troparia* and the *kontákia* were abandoned in favor of the so-called *kanon*, or cycle of nine hymns, with the same melody (*heirmós*) repeated in each of the stanzas.

Our knowledge of the oldest orthodox music, however, is limited. The Byzantine neumatic notation of the first millennium is undecipherable, and the next of kin of the Byzantine chant—the Armenian, Coptic, Ethiopian, and Syrian cantillations of that time—have left no notations at all.

Whatever their similarities and whatever their differences were, they have one negative fact in common: they never developed into polyphony. The art of heaping and weaving several voice parts was a typically western achievement.

THE ONLY POLYPHONIC FORM in early medieval times was the *diaphony* or 'singing apart,' oftener called the *órganum* (a name to be accented on the first syllable). It was first described in the ninth century (though not by the monk Hucbald), but seems to have existed a long time before in folk music, in which art it survives to this day in Iceland. Indeed, there is a strong possibility that it was used in the Church itself, at least in the seventh century. A group of liturgical singers then had the title of *paraphonistae*, the term *paraphonia* denoting a fifth or fourth consonance.

Órgana were performed by soloists in alternation with the plainsong cantillation of the chorus.

There were two forms, one strict, one free. In either one, an

evenly and very slowly progressing liturgical melody, the *vox principalis*, was accompanied below by a *vox organalis*. Later terminology called the *principalis* a *tenor*, or 'sustained,' part, or else a *cantus firmus*, that is, a 'fixed' melody taken from the Gregorian chant to serve as the musical and spiritual backbone of a polyphonic composition.

In the stricter *órganum*, the *organalis* accompanied in solemn fifth or fourth parallels—*paraphoniatic*—from the beginning to the end. On festive occasions, the larger cathedrals and abbeys would enrich this simple parallel by doubling either voice, the lower one at the octave above, and the higher one at the octave below, with the result of a triple parallel in piled-up octaves, fifths, and fourths.

The freer *órganum* started in unison. After the first note, the accompanying organal voice marked time by repeating the initial note until the principal voice was a fourth away. From then on, it followed in parallel fourths until, at the end, the two voices reconverged to unison.

In either form of *órganum*, the notes of the two voices coincided strictly. They stood note against note or, in Latin terminology, *punctus contra punctum* (whence our word counterpoint, although the note-against-note form is today only one of its subdivisions or 'species').

The origin of the name *órganum* is an open question. A connection with the organ has been considered, with the idea that this instrument might have played the organal voice, but recent scholars reject so unfounded a suggestion. However, this rejection should be revised, since the later critics—and the earlier, for that matter—did not know the decisive fact that the medieval organ played in octave and fifth parallels exclusively.

The medieval organ was indeed what modern terminology calls a mixture. The operation of each individual key, or slider, as we should rather say, was answered, not by one pipe, but by two or a whole rank or compound of pipes. Such a compound consisted of the note requested, its octave, double, triple, and

maybe quadruple octave, and of fifths between several of them. The famous organ of A.D. 980 in the monastery at Winchester, England, had ten such pipes to each slider, and later medieval organs, up to twenty. No stop existed to disconnect, say, the double octaves or the triple octaves. All larger organs played in multiple parallels of fifths and octaves throughout. Small wonder that contemporaries compared their sound to the roar of thunder.

How tenacious this principle was appears from the fact that in Italy such stopless mixture organs were still built as late as the middle of the fifteenth century.

THE STRUGGLE FOR ORDER. Europe had joined the evolution of music as a primitive country, without notation, without a system of any kind, without regulation. Everybody, juggler, bard, or peasant, fiddled and sang to his heart's content, and it did not matter whether he took the whole- and semitones a trifle larger or smaller. He probably did not even know what whole- and semitones were. But when people began to sing in counterpoint, when organs, chimes, and harps had to be tuned, tradition and personal taste were no longer sufficient. As the latest of the great civilizations, the West had to do what the Orient had done millenniums before: proceed to a lawful system of steps and intervals, of con- and dissonances.

In such an attempt, the musical ear could hardly be accepted as a reliable guide and still less as an unbiased judge. What medieval man would have trusted in his senses anyway? Here too, as everywhere else, he effaced himself behind the authority of the ancients, Greeks and Romans. But alas, the Greeks had had no less than eight quite different sizes of thirds and twenty different seconds. Which were the 'correct' ones?

In eight or nine hundred years, the question was asked again and again and never answered for good and all. The

scholars reckoned and reasoned, quoted and speculated, and still no final solution was found.

At least, a few kinds of instruments with fairly preservable pitches were built, to help in establishing standards and to facilitate the training of musicians.

The first of these instruments was the *monochord*, described in the musical bible of the Middle Ages, the five books *De Musica*, in which Theodorich's unfortunate chancellor Boethius had, around A.D. 500, given a last résumé of the ancient theory of music. The monochord had a long and narrow sound box with a single string under which a movable bridge could be shifted along a graduated scale, thus allowing the tester to read immediately the mathematical ratio for each position of the stopping bridge (cf. plate XV in the author's *History of Musical Instruments* on p. 256).

A second instrument was the bell chime, called, in the plural form, *cymbala*, a set of tuned bells on a horizontal bar, to be struck with one or two hammers. A third instrument was the organ.

However, the naïve recipes of medieval bell founders betray all the desperate uncertainty in the struggle for scales and intervals. As late as the twelfth century, one of them recommended choosing an arbitrary weight of metal to start with and just calling it *C*, to add an eighth of this weight for *D*, an eighth of the new weight for *E*, and so on—without realizing that the weight alone was not the only agent involved. And in a similar, insufficient way, the organ builders determined the lengths of their pipes from the ratios of the intervals desired, but failed to take the equally important diameters into account. Thus, even the instruments were doubtful helps, and the situation would have been hopeless had not the human musical mind, as a rule, emended and adjusted the questionable message received by the ear. For music is after all a case of psychology, not of physics—of mental interpretation, not of the never-perfect sounding mediums.

A long, long road was still ahead.

SECULAR MUSIC, which probably found its way into the liturgy via sequence and trope, has of necessity a more than modest place in this survey. Contemporary sources, written by clerics for clerics, did not condescend to mention it; and folk music itself, depending on oral tradition, seldom availed itself of notation. All conclusions must be drawn from indirect evidences—from a few songs of the time preserved in later notation, from the popular music of jugglers and minstrels from ages after A.D. 1000, and from the folksongs of today, with their amazing tenacity.

All these evidences bear witness to one fact: the non-Mediterranean secular music of Europe did not follow the tetrachordal and modal style of the Church (except in cases of wilful imitation). Instead, it organized its tunes in thirds: their framework consisted of one third, or of two, three, four, and even, as in today's folksongs of Iceland and Scandinavia, five thirds heaped above one another. Such chains complement each two consecutive thirds to form a fifth. Therefore, the thirds are major and minor in regular alternation.

The resulting 'chains' were not scales, but loose organizations, pieced together out of single elements without any thought given to higher units beyond the fifth. The decisive change forward came from the organizing power of the octave, of which, as the evidence shows, the northerners became increasingly aware. For we find tertial chains in which the third of the thirds, a seventh away from the groundtone (as *C-E, E-G, G-B*), was sung but was at once pulled up to make an octave. Wherever this happened, the third-fifth-octave skeleton of later western music was established. Where the major third was in evidence, as in the chain *F-A-C*, the major mode was the necessary outcome. A chain with the minor third in evidence, as *D-F-A*, led to the minor mode.

Harmony, too, is, at least partially, an outgrowth of the

tertial chains. Whenever a musical style demands accompanying notes, it prefers them at intervals similar to those that it favors as melodic steps. In other words, the intervals used in coincidence agree with the intervals used in succession. Thus, the tertial melody of the western past begot our triadic harmony.

The characteristic alternation between the tonic and the dominant chord in our harmony is, in a similar way, prepared by the alternation of such triads as successive steps in the medieval chains of thirds, as C-E-G and G-B-D.

READING: Gustave Reese, *Music in the Middle Ages*, New York, 1940: Sections 3-9. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 14. Curt Sachs, *The Rise of Music in the Ancient World*, New York, 1943: Section Seven. Curt Sachs, *World History of the Dance*, New York, 1937: pages 248 ff. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Chapter 3.

5

THE ROMANESQUE PERIOD

A.D. 1000-1150

THE MASS, the central ceremony of the Catholic Church, was completed in the eleventh century by the addition of the *Gloria* and the *Credo* sections. Since then, it has followed this plan:

While the priest betakes himself to the altar, the singers begin the *antiphona ad introitum* or simply Introit ('entry'). This is sung by one singer on week days and minor feasts, by two singers on Sundays and other feasts, and, where possible, by four singers at solemn occasions. An asterisk in the prayer books marks where the chorus takes over.

The Mass itself has five principal sections, called after their initial words *Kyrie*, *Gloria*, *Credo*, *Sanctus*, and *Agnus*. The first section, a prayer for mercy, consists of nine invocations in Greek, the language of the Eastern Church: three *Kyrie eleison* (Lord, have mercy upon us), three *Christe eleison* (Christ, have mercy upon us), and again three *Kyrie eleison*.

Thereupon the priest intones the *Gloria in excelsis Deo* (Glory be to God on high), and the choir continues *Et in terra pax hominibus bonae voluntatis* (And peace on earth to men of good will). The *Gloria* is followed by an *Epistle* from the Apostles and a *Lesson* from the Gospels.

The third main section opens with the priest's intonation of the confession of faith, *Credo in unum Deum* (I believe in one God), and is taken up by the chorus on the following words *Patrem omnipotentem* (The omnipotent Father). It in-

cludes the sections *Et incarnatus est* (And was incarnated) and *Crucifixus* (Crucified), which are often independent movements in polyphonic settings of the Mass.

The *Offertory* and, as a prayer of thanks, the *Preface* are heard while the holy wafer is being prepared. The Preface leads without a break into the *Sanctus Sanctus Sanctus* (Holy, Holy, Holy) with the *Osanna*, or *Hosanna in excelsis*, and the *Benedictus qui venit in nómine Dómini* (Blessed be he who cometh in the name of the Lord); and the threefold *Agnus Dei qui tollis peccata mundi* (Lamb of God who beareth the sins of the world) concludes the Mass, but has the *Communion* as an epilogue after the partaking of the wafer.

At last, the priest dismisses the congregation by chanting the words *Ite missa est* with the choral response *Deo gratias* (Go, [the congregation] is dismissed. Thanks to God). It is from the word *missa* that the Mass has its name.

The plan just outlined shows the Ordinary or skeleton of the Mass for almost all occasions where a Mass is said or sung. For each of its sections, the liturgy provides a selection of melodies; in other words, there is not just one Kyrie or one Gloria melody, but quite an impressive number of them.

Right here, the student should realize that the later polyphonic 'concert' Masses, such as Bach's *B minor Mass* or Beethoven's *Missa solemnis*, are not suitable for liturgical use because (1) they are too long, (2) they repeat the words of the text, and (3) they give to the chorus and orchestra the incipits of the Gloria and of the Credo—*Gloria in excelsis Deo* and *Credo in unum Deum*—which the liturgy assigns to the intoning priest before the chorus takes over with *Et in terra pax* and *Patrem omnipotentem*.

The so-called Proper of the Mass, as against the Ordinary, provides, for every day and for every special occasion, exchangeable parts either to be added to the Ordinary or else to replace unsuitable parts of the Ordinary. The Introit at the beginning of the Mass, for instance, is exchangeable; but the

two principal variable sections are inserted between Lesson and Epistle. One is the responsorial and highly florid *Gradual* (AS 34 A), and the other, the *Alleluia*, a dithyrambic praise of God with an extended *jubilus coloratura* on the ending vowel *a* (AS 34 B). Where the occasion is too mournful to admit an *alleluia*, a *tract* in the second or eighth mode (on A or D) is sung in 'direct' psalmody without choral responses.

The best known of these mournful Masses—and one particularly important for music students in view of later polyphonic compositions, by Mozart, Berlioz, Verdi and many others—is the *Missa pro defunctis* or Mass for the Dead, which must be sung at every funeral service (cf. page 72). Its Introit is a prayer for eternal rest, *Requiem aeternam dona eis* (whence the short-name of the Mass: *Requiem*). The *Gloria* as well as the *Credo* are omitted, and the *Alleluia* is replaced by the sequence of the Last Judgment, *Dies irae, dies illa / Solvet saeculum in favilla* (Doomsday, day of terror / Grinds to dust the world of error). The first page of the Mass for the Dead in the official Roman version is reproduced on page 72.

Of the many liturgical books that the Catholic Church has printed for laymen and priests:

The Kyrial contains the Ordinary of the Mass.

The Missal and the Gradual (plate II) contain both the Ordinary and the Proper of the Mass.

The Breviary and the Antiphonal contain the Offices.

The Responsorial contains the liturgy for Matins.

The Vespéral is for Vespers.

The Processional is for processions.

The Pontifical is used for bishops' functions.

The actually important book, both for Catholic congregations and for music students, is the *Liber Usualis*, a recent combination of the Gradual and the Antiphonal, for Masses and Offices.

Missa pro Defunctis.

Intr.
VI.

R EQUI- EM * ae-tér- nam do-na e- is Dómi-
ne: et lux perpé-tu- a lú-ce- at e- is. *Ps.* Te de-
cet hymnus De- us in Si- on, et ti-bi reddé-tur vo-tum in Je-rú-
sa-lem: * exáudi o-ra-ti- ó-nem me- am, ad te omnis ca-ro
vé-ni- et. Ré-qui- em.

VI.

K Y- RI- E * e- lé- i-son. *ijj.* Chri- ste e- lé- i-son. *ijj.*
Ký- ri- e e- lé- i-son. *ij.* Ký- ri- e * e- lé- i-son.

Intr. stands for *Introitus*; *VI* denotes the sixth Church mode or Hypolydian, with *C-F-C* as the skeleton and *F* as the final.

The clef makes the fourth line *c*. The syllable *re* has a *salicus*; the syllable *qui*, a *punctum*; the syllable *em* a *punctum*. The following asterisk marks the entry of the chorus. *Ae* has a *salicus*; the syllable *ter*, a compound of a *clivis* and a *porrectus*; the syllable *nam*, a *clivis*. The following vertical dash marks a 'minor' division; the through dash after *Dómine*, a 'major' division. *Ps.* marks the beginning of a psalm verse to be sung by soloists. The note-like signs at the ends of the staff lines are *custodes*, or 'directs', which warn the singers of the first note on the following staff.

The flat at the beginning of the *Kyrie* indicates flattening the subsequent *B*; it is not a key signature. The symbols *ij* and *ijj* denote one and two repetitions.

BEFORE the eleventh century had reached its middle, three outstanding clerics presented the musical liturgy with a few pieces so full of beauty, ecstasy, and power that the Church has kept them to this day.

The most remarkable among these masters was Heriman the Cripple, or, latinized, Hermannus Contractus (1013-1054) of the monastery Reichenau on the Lake of Constance. Giving the sublimest expression to the newly sprung-up worship of the Virgin, he created the three antiphons known as *B.M.V.*, or *Beatae Mariae Virginis*, namely:

*Alma redemptoris mater.
Ave praeclara maris stella.
Salve regina misericordiae.*

or, metrically in English:

*Queenly mother of the Savior.
Hail, brightest star upon the ocean.
Homage to thee, oh queen of compassion.*

Throughout the later centuries, numberless polyphonic compositions based on these melodies (cf. AS 35, Dufay, and AS 91, anonymous) have proved the timeless grandeur of Heriman's work.

The second of these great composers was Bruno, Count of Egisheim in Alsace—thereafter (1048-1054) Pope St. Leo IX—who created an ecstatic far-flung *Gloria in excelsis Deo*, which the Church has listed as the *Gloria I* (in the eighth, Hypomixolydian, mode) among the *Cantus ad libitum*. The reader finds it in the American edition of the *Liber Usualis* on page 81.

The third composer, creator of the granitic, hymn-like Easter sequence *Victimae paschalis laudes*, is supposed to be the Burgundian Wipo (d. c. 1048), chaplain to the German Emperor Henry III.

Still, these three great names and their work have been overshadowed by the contributions to theory, of the same age, by Guido of Arezzo.

SOLMISATION. Guido of Arezzo, who lived from about 995 to 1050, was a Benedictine monk of outstanding merits. Although he cannot claim the total of all the musical inventions that later centuries lavishly ascribed to him, he composed an influential book on music, the *Micrólogus de disciplina artis músicae*, perfected the staff notation on its way from neumes to plainsong script, and introduced the old oriental solmisation.

Solmisation was a method of singing any melody of the Church on only six syllables—*ut re mi fa sol la*—the two syllables *sol* and *mi* providing the name. The point was that the syllables stood for the notes of the melody according, not to their pitches or absolute position in musical space, but to their relative position. In this, Guido's solmisation was similar to the modern 'movable do' method: the step *mi-fa* invariably denoted a semitone. A singer who memorized some tune with the appropriate syllables could hardly ever be mistaken: the step *mi-fa* was always a semitone, while all the other steps were major seconds.

There was one disconcerting difficulty, though. When a melody exceeded the range of six notes, the set of six syllables was obviously insufficient. It was even misleading when the note *B* had to be flatted—for instance, in the frequent turn *A-B \flat -A*, which, according to the very nature and meaning of solmisation, required the syllables *mi-fa* on *A-B \flat* just as the preceding part of the melody had needed them on *E-F*.

In order to introduce this second *mi-fa*, the singer held other similar sets of syllables in readiness and 'mutated' from one to another set according to the requirements of his melodies.

Mutation, or melodic modulation, required a kind of marshalling yard where melodies could be shifted from track to track. Such a yard was found in an ingenious system of three overlapping hexachords, or (diatonic) sets of six notes, all similar in structure but different in pitch. Following the major mode, they were sung on the syllables *ut re mi fa sol la*, but started either on C as the 'natural' hexachord, or on F as the 'soft' hexachord, or on G as the 'hard' hexachord.

At first sight, it seems incomprehensible that two sets of notes in exactly the same arrangement should be distinguished as soft and hard. Actually, the two epithets did not derive from distinctive qualities of the hexachords themselves. They alluded rather to the two shapes of the letter B which were distinctive of the two hexachords: in the hexachord on F, the note B, representing the fourth of the scale, had to be flatted and was indicated by a rounded letter B, the *B rotundum*. In the hexachord on G, on the contrary, the note B, representing the major third of the scale, had to be natural and was indicated by an angular letter B, the *B quadrum*. The first sign was 'soft,' and the second, 'hard.'

The two forms of the letter B have survived; they still exist as the international symbols for flat and natural before the head of a note. And the two Latin names of the hexachords, *molle* and *durum*, or 'soft' and 'hard,' are still extant. The French call a flat *bémol*, the Spaniards *bemol*, and the Italians *bemolle*, and the Spaniards also speak of *becuadrado*. The Germans, on the other hand, call the major and minor modes *dur* and *moll*.

On page 76 is the marshalling yard, with, left and right, the modern letter names of the twenty notes (first column), the ancient letter names without specified octaves (center), and the medieval call-names of the individual notes, composed of their letters and the syllables of the one, two, or three hexachords to which they could belong (last column).

In this marshalling yard, the 'points' could be shifted wherever it seemed practical in order to pass smoothly from

Rorate coeli, in the first mode, shows an exception in its first mutation, where the *hexachordum naturale* can obviously not be reached via its *re* and therefore must be joined on its *mi*. More important than this detail is the fact that so short a melody must avail itself of each one of the three hexachords, on account of its extended range as well as of the two different *B*'s that it needs.

It now becomes obvious why medieval theory had to use hexachords, not octaves, as in the Church modes themselves. The reason-for-being of solmisation was that *mi-fa* served as a symbol of any semitone, wherever it stood. Therefore, the basic set of syllables would have been useless if it had contained more than one semitone. The maximum length of a one-semitonal stretch was a sixth; an extension upward to what is now *ti* would have left doubtful whether the note *B* had to form a semitone with *A* or with *C*.

Again, the number of hexachords had to be three, since there were three possible semitones: *E-F*, *A-B_♭*, *B_♮-C*.

Guido's 'hand'—prefigured in similar systems of China and India—facilitated correct singing by adding tactile to audible memorization. It consisted of having the right index finger touch appropriate spots of the open left hand, to which the twenty notes of the musical range were allocated in a somewhat perplexing tangle, the lowest gamma *ut* having its place on the tip of the thumb, with the scale progressing down the thumb, across the metacarpus, up the small finger, across the finger tips, down the index, back to the third phalange of the ringfinger, and in an S-curve up to a place in the air above the tip of the middle finger for the highest note *E la*, since there was no space left for it on the nineteen phalanges of the hand. Though confusing rather than helpful, at least from our viewpoint, the Guidonian hand was in use far into the Later Ages as a symbol and sum total of musical pedagogics.

It also fits the interest in practical pedagogy of the eleventh century that, among its numerous treatises, we find an anonymous *vocabularium musicum*—the earliest dictionary of music.

POLYPHONY AND NOTATION. The polyphonic form used to embellish the liturgy on festive days was still the *organum*. This form, however, was changing its character thoroughly. We still hear of parallel lines, note against note. But this rigid pattern was already yielding to a freer counterpoint. The *cantus firmus* retreated to the lower voice part and left the more conspicuous higher part to the counterpointing *vox organalis*, which in turn liberated itself from the fetters of parallel motion and showed a growing tendency to answer ascending steps of the *principalis* by descending steps and vice-versa, in what amounted to 'contrary' motion. The *vox organalis* did not hesitate to cross the *cantus firmus*, and even dared to oppose two or more notes against one note of the *cantus firmus*. In other words, the organum was steadily developing from a clumsy parallel setting to what our teachers call the first and second species of counterpoint. Unfortunately, the vagueness of neumatic notation makes any correct transcription of the extant sources quite impossible.

Even contemporaries were not able to achieve exactness and demanded a more reliable script. Heriman the Cripple, or Hermannus Contractus, complied by adding small letters to indicate the sizes of steps: an *e* for *equisonus*, or unison, an *s* for *semitonium*, a *t* for *tonus*, a *ts* for the minor third (tone plus semitone), a *tt* for the major third (two tones), and so on.

But the pregnant improvement started from the single red reference line for *f*, some time around the year 1000. Not much later, a second, green or yellow line was introduced for the higher *c'*, and Guido of Arezzo is rightly or wrongly said to have developed these beginnings to a four-line staff for *d-f-a-c'*, with the spaces in between left for *e-g-b*.

At the same time, a system of four clefs was ready. A letter *C* on one of the three upper lines at the beginning of the staff would indicate whether the note *c'* was left on the highest

line or else transposed to a lower one when the range of the piece was higher than usual. A fourth clef, a *c* preceded by a kind of note-form, gave *f* its place on the third line and therewith marked a transposition by one line upward.

The four staff lines with their four clefs have been preserved in the Catholic Church to this day.

The use of staff lines implied a special adaptation of the neumes. Simple dashes picturing motion gestures would no longer do. Converted into actual pitch symbols, the neumes were given reinforced endings where they met the lines or spaces of the staff that showed their pitches: head and stem, the *cauda* or tail, became distinctly separate parts of the note. Following local habits of holding the pen, these heads were given either a square form (the so-called Roman) or (plate V) a diamond shape (the Gothic). The *punctum* became a stemless head, and the *virga*, a head with a stem. The other, complex, neumes, in which one stroke of the pen depicted the melodic line of a single step or a group of steps, were kept as *ligatures* of contracted squares and oblique bars. They were used—as they still are in Catholic prayer books—to slur the two or more notes that are to be sung on one syllable of the text.

The notes themselves had been given letter-names as early as the latter times of antiquity. Only, the letters of the alphabet were not repeated from octave to octave, but continued throughout the range of music, until the modern usage was adopted in the tenth century, if not before. There was a difference, though: the first note of the octave, our modern C, was then more logically called A; and B was what today is D. The unfortunate shift to the modern names was caused by the monk Odo of Cluny, who lived in the tenth century, too. Ignoring the secular major mode, which was already taking shape, he adapted the A-G series to the Church modes, in which not C, but A, the basis of the second mode or Hypodorian, was the lowest note, and G, the octave of the seventh or Mixolydian mode, was the highest one. Unbelievable as it seems, our mod-

ern practice is, after a thousand years, still the victim of forces that even then were reactionary.

The Church itself could not but open its gates to the major mode, at least where the liturgy allowed popular melodies to mingle with the Gregorian chant—in the sequence (cf. p. 58 ff). A few French sequences of the eleventh century, like *Laetabundus exsultet* and *Gaudete vos fideles*, extant in contemporary manuscripts, are not only marchlike and catchy, but also so definitely in major that they even show the characteristic 'leading' semitone below the tonic, which was far from the modal ideals of the Church.

The only secular music of which we know is a special kind of song, in bloom from the end of the tenth to the twelfth century. Its poets and composers were the *goliards*, or 'wags'—uprooted students and clerics who, gadding about all through the continent, expressed their love of woman, wine, and life in a curious, half-popular, half-scholarly Latin poetry. Unfortunately, the small amount of preserved melodies is written down in staffless neumes, so that, once more, transcription is unfeasible. Only one of the love songs—*O admirabile Veneris idolum* (tenth century)—exists also in letter notation, which at least reveals a simple repetitive form and unmistakable major mode, without, however, betraying the rhythm.

READING: Gustave Reese, *Music in the Middle Ages*, New York, 1940. Joseph A. Dunney, *The Mass*, New York, 1942. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 14. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Sections 1050 and 1120.

6

THE EARLY AND CENTRAL
GOTHIC PERIODS

1150-1300

TROUBADOURS AND TROUVÈRES.
The advent of the troubadours in the last years of the eleventh century marks a decisive change in the concept of knightly life. Spent so far in the rougher arts of fighting, hunting, and drinking, it began to rise to an ecstatic worship of the Virgin and of mortal women, to elaborate chivalrous ethics, stylized manners, and the appreciation of artful poetry and music.

Aristocratic poetry with its treasure of melodies was the work of *troubadours* or, in their native Provençal language, *trobadors*, 'inventors.' They were either sedentary courtiers, if not princes, or else itinerant bards who travelled from castle to castle and occasionally met in *puy*s, or contests.

Those who 'invented' verses were not necessarily knights themselves; low birth by no means excluded a man whose verses conformed to the atmosphere of educated society. The sources list Guillaume de Poitou (1071-1127), who was a count, alongside Marcabru (c. 1130-c. 1150), who had been a foundling laid on the threshold of a rich man's house, and Bernart de Ventadour (c. 1150-after 1170), who was the son of a furnace stoker.

Any caste-like seclusion was the less sought after or achieved in that the troubadour lived often in the company of some professional minstrel or juggler, who played the fiddle to his master's singing, wrote the verses down (since writing was not yet a

compulsory part of knightly education), and possibly had a vital part in setting them to music. Such steady contact with folk musicians must have prevented the melodies of the knights from gliding away into either amateurish poverty or snobbish over-sophistication.

The following episode is characteristic of such contact. One day, around the year 1195, two professional fiddlers from France made their appearance at the margravian court of Montferrat in northern Italy near Turin, and entertained the distinguished party with their popular dance tunes. The court enjoyed one particularly; a new *estampie*, a stately gliding dance in 4×3 beats. Only Raimbaut de Vaqueiras, a knight and Provençal troubadour in love with the sister of the margrave, remained silent and depressed. Thereupon the young lady asked him to be cheerful and to sing in his turn. Obedient, he rose and sang a couple of impromptu verses to the catchy melody just heard. The charming piece is preserved, and has been recorded on 2000 Y no. 6.

This recording, and for that matter any realization in sound or on paper, is to a certain extent arbitrary. For the more than three hundred melodies of Provençal troubadours collected in beautiful *chansonniers* of the time are written in plainsong notation, which does not tell what the time-values of the individual notes, and hence their rhythm, should be. In this predicament, two French historians of music at the beginning of our century, Pierre Aubry and Jean-Baptiste Beck, argued for a metrical interpretation. Since rhythm was not written out, so they argued, it must be implied, and it could be implied only in the unmistakable meter of the text (in a way similar to most Greek melodies). However, these meters were usually either iambic (short-long), or trochaic (long-short). The result was a tedious, limping triple-time throughout.

This is hard to take on musical grounds. And, if there is no other lead than the verses of the text, must these songs have had a compulsory, unequivocal rhythm at all? Why, then, did the composers or copyists not use the time-values provided by the

mensural notation (cf. pages 92 ff), which, after all, existed in the thirteenth century? And why did the most important musical writer around 1300, the Frenchman Johannes de Grocheo, expressly dissociate all secular music from precise time-beating: "*not ita praecise mensurata est*"? As matters stand, these songs may have been sung in whatever rhythm the singer preferred; indeed, they may have had no definite rhythm at all. And since they were Mediterranean, they may have been dissolved in a good deal of free and improvised coloratura anyway.

The songs of the Provençal troubadours were carefully classified. There were the crusader's song, or *sirventes*; the *planh*, or lament for a fellow-knight; the *tenson*, or song on a given topic for some *puy*, or contest, like that depicted in the second act of Wagner's *Tannhäuser*; the *pastoreta*, or modish shepherd's song; the *serena*, or serenade; and the *alba*, or morning song after a night spent with the sweetheart.

Simila. in scope and essence was the northern French offshoot of the art of the troubadours, that of the *trouvères*, of which about eight hundred melodies have been preserved. This art began with the poems of Blondel de Nesles (c. 1150-1200), who did *not* rescue King Richard Coeur-de-Lion by wandering from dungeon to dungeon and singing a song well known to both of them until he heard the king's refrain; and it ended with Adam de la Halle (1220-1287), the famous poet-composer of a pastoral play, *Le Jeu de Robin et de Marion*, which dates from either 1275 or 1285. The period of the *trouvères* thus extended over hardly more than a hundred years. AS 18 records Blondel, Perrin d'Agincourt (c. 1250), and King Richard the Lionhearted of England (1157-1199), who was a *trouvère*, too.

Altogether, the *trouvères* gave preference to stricter structures. More than in the songs of the southern troubadours, we find in the northern repertory the well-assorted stock of secular and partly secular vocal forms, to be discussed in the following section.

THE MUSICAL FORMS of secular songs in France have been classified into four principal types.

(1) The hymn or stanza type, represented by the *vers* and *canzo* forms, with a through melody for the whole stanza, to be used again for each consecutive stanza.

The *vers* had a through melody in a narrower sense, which covered the whole stanza without any repetition of phrases. A *canzo* stanza, on the contrary, followed the structure AAB: one first phrase covered two lines, and its repetition, the next two lines, while the two final lines were sung on a different melody. A possible seventh line used to take up the second part of phrase A as a coda.

(2) The litany type, in which each line was sung to the same short melody.

There was the ordinary form, as in the epics, or *chansons de geste*, where the (sometimes fifty) lines of a *laisse*, or section, repeated the same melody all over and over again, while only the last one broke loose and followed a concluding cadence. And there was the *rotrouenge*, where a chorus took up the last, divergent line as a refrain.

(3) The sequence type with one melody to every two lines: AA, BB, CC, and so on.

The *lai* was the simplest sequence form, although in later times it also provided one melody for three or four lines in various combinations. The (instrumental) *estampie* in 4×3 time, a courtly gliding dance, did not repeat the musical phrase, or *punctum* (as it was called in dance music), in a strict form, but answered the overt, or half-cadence, of the first line by a *clos*, or full cadence, in the second line of each of its pairs.

(4) The round-dance (*carole*) or refrain type, in which a leader sang the stanzas, and the chorus of the dancers answered with the refrain. There were three forms, *rondeau*, *virelai*, and *ballade*.

The French *rondeau* was, in its oldest form (twelfth and thirteenth centuries), a song performed by those engaged in a round-dance. The leader acted as the soloist, and the chorus of the dancers responded by repeating his part. This was done in a curious way: the catchy melody, covering the entire stanza, consisted of two phrases of even or uneven length (we call them A and B); the soloist sang the first one (A), which was at once repeated by the chorus; then, the soloist sang the whole tune (AB), which again was repeated by the chorus:

| | | |
|----------|---|----|
| soloist: | A | AB |
| chorus: | A | AB |

From the thirteenth century on, the final refrain of the chorus was anticipated at the beginning:

| | | |
|----------|----|------|
| soloist: | A | AB |
| chorus: | AB | A AB |

The *virelai* and the *ballade*, on the other hand, had true refrains, with a melody different from that of the soloist.

The *virelai*, whose name, pronounced *veerelay*, stems from Old French *virer* ('to veer') and *lai* ('poem') and hints at the regular turning movement of round dances, had the same melodic phrase for each of its lines, however many there were, except for the last one, which anticipated the melody of the refrain:

| | | |
|----------|-------------|---|
| refrain: | A | A |
| stanza: | BBB . . . A | |

The same form rules the famous Spanish *cantigas* in honor of the Virgin, more than four hundred melodies of which were written down for King Alfonso el Sabio and have been preserved in beautiful, illuminated manuscripts of the later thirteenth century.

The *ballade* of the *trouvères* must not be confused with the Italian *ballata* of the fourteenth century or, for that matter, with the epic ballad of the last two hundred years. It did not

anticipate the refrain; it followed the AAB form of the Provençal *canzo* but added a refrain which ended the stanza on a melodic phrase of its own:

stanza: AAB
refrain: C

These descriptions do not mention the alternation of a soloist and a chorus as the singers of stanzas and refrains because the three round-dance forms had already begun to part from the dance proper, to become merely musical patterns (such as later in Chopin's waltzes, mazurkas, and polonaises), and to leave both stanzas and refrains to the same soloist.

THE MINNESINGER or *Minnesänger* (from *minne*, 'love') was the German counterpart of the troubadour and, in a way, even more so of the *trouvère*. He and his art were modeled after patterns from France, like the whole aristocratic culture of the later Middle Ages. At the beginning, the Germans even availed themselves of original melodies from France and adapted them to German words (cf. 2000 Y no. 6).

Still, the Minnesinger had features of their own. The texts leant more to the religious side, and also the melodies, less popular and dancelike, were closer to the style of the Church: not the merry major mode of the jugglers prevailed, but the solemn Dorian and Phrygian of the priests. Again, the leading form of Minnesinger music derived from France: the *Bar*, or stanza, of two *Stollen* on the same melody and a concluding epode, or *Abgesang*, on a different melody derived from the *canzo* of the troubadours. The *Preislied* in Wagner's *Die Meistersinger* follows this typical AAB form.

The best known Minnesinger are the lyrical, passionate Walter von der Vogelweide (c. 1170-c. 1230) and, a little later, Wolfram von Eschenbach, poet of the epics *Parzival* and

*Titur*el (which served Wagner as the sources of his last work, *Parsifal*). None of Wolfram's melodies has been preserved, but we know a few of Walter's, one of which has become a Protestant choral and is still alive in the Old Hundred (cf. 2000 Y no. 6 and AS 18).

Beside these uplifted poets, there was Neithart von Reuenthal (early thirteenth century), who moved the scene from chivalrous, refined, and spiritual *Minne* to the drastic sex life of uncouth swains but also added a healthy infusion of brisk and simple tunes from the countryside.

The *Minnesang* lasted altogether from the times of Spervogel (c. 1200) to those of Hugo von Montfort (1357-1423) and the Tirolese Oswald von Wolkenstein (1377-1445); that is, it lagged behind the knightly singers of France by a hundred years.

Once more, it must be emphasized that there was hardly any barrier between the songs for knights and those for commoners. On the contrary: Johannes de Grocheo, who lived at the end of the thirteenth century, recommended expressly that the *chants de geste* "be sung before old people, working burghers, and low-caste men when they rest from their toil, so they might, on hearing about the misery of others, better stand their own depressing condition and with more cheerfulness resume their occupations. Hence this kind of song is important for the conservation of the State." Which, in a modest way, recalls Confucius' and Plato's musico-political theories.

In a similar naive utilitarianism, youths were required to sing *cantilenas* in order "that they may not entirely get lost in idleness." One form of *cantilena*, the *stantipes*, was so hard to perform that "it kept the minds of the boys and the maidens busy and took them away from evil thoughts." And another form of *cantilena*, the nimble, rapid *ductia*, "protected the hearts of girls and boys from vanity and, as they say, from the kind of passion that they give the name of love."

Singing and dancing were severed in the thirteenth century. Ballads and *rondeaux* became purely vocal forms detached

from actual dancing, while dancing itself was accompanied on instruments.

THE JUGGLERS or Minstrels, in charge of instrumental dance music, were a motley lot. Some descended from the cosmopolitan vagrants of the disintegrating Roman Empire, some from Celtic druids, Nordic scalds, continental bards. Runaway monks and uprooted elements from all strata of society kept joining the older stock. And motley was their trade. No rigid line separated the musician proper from the skilful acrobat who, with balls and missile knives, with dancing and rope-walking, amused both the courts and the villagers. But even within the musical field, the juggler was a Jack-of-all-trades. He was, as one troubadour stated, expected to play no less than nine different instruments.

Though indispensable and received with delight as entertainers—doubly welcome in a time without newspapers, books, theaters, political life, or any considerable communication from place to place—the jugglers were untouchables. The solidifying middle class, proud of their houses and crafts, frowned upon a shapeless class that lived on the highways and wandered from town to town, without a home, without the ties of an honest, sedate trade, without the kind of respectability that the burghers were building up. The Church, on the other hand, resented the high percentage of runaway clerics among the jugglers and the anticlerical trends that they nourished and expressed.

The jugglers answered with attempts at organization after the model of the craftsmen's guilds and with rigid professional statutes. In 1321, those in Paris founded a *Confrérie et Corporation des Ménestrels de Paris* under a 'king,' *le roi des ménestrels*; and similar brotherhoods came to life in other countries.

But this striving for respectability did not help too much.

The Church refused the sacraments, including matrimony. Nor did the civil law protect the jugglers: the juggler who had suffered tort was allowed to slap the offender's shadow only, since he himself had only a shadow of honor. As late as 1406, the municipality of Basel forbade the jugglers to wear trousers!

The powers, spiritual and secular, came heavily down upon the juggler.

Still, the juggler was one of the most important agents of medieval civilization. His poetry, his melody were an essential part of public and private life; he expressed what the Church in its aloofness was not able or willing to express; and he was admitted through a backdoor to the very liturgy to help in filling the gap between the earth and heaven.

Coronations, princely weddings, Church feasts and councils were the great occasions for the vagrant player. Courtly poets of the time delight in enumerating all the instruments that sounded together. One German mentions twenty-five, a Spaniard twenty-nine, and the Frenchman Guillaume de Machaut, a musician himself and therefore especially reliable, thirty-six kinds of instruments, some with many men playing the same part. Historians confirm these numbers. Four hundred players performed in 1340 at the court of Mantua, four hundred and fifty during the *Reichstag* at Frankfurt in 1397, and the Church councils of the time are said to have attracted more than a thousand each. It is obvious that they played oftenest individually or in small groups. But the descriptions and contemporary paintings of heavenly orchestras leave little doubt that the players also performed in huge ensembles with *très grande mélodie* and *très grand noise*.

I NSTRUMENTAL MUSIC as an independent art was, indeed, a creation of jugglers, and, so far, the thirteenth century yields the earliest evidences of it. Some motets written down without words in any of their voice parts were expressly

meant for *viellatores*, or fiddlers, and the courtly poets of the time, whose predecessors had exclusively mentioned dances to which the dancers sang, speak now of dance tunes played by *videlaere* and pipers, or even by actual orchestras with strings and trumpets and drums.

The instruments themselves were manifold enough. Besides the long-established fiddles and harps, some lutes and kindred instruments had already been introduced from Muhammedan Spain, but were not yet essential in western music. Two oriental zithers, on the other hand, were given a remarkable welcome: the plucked psaltery from Egypt and the beaten dulcimer from Persia. Both of them were destined to live on with keyboards as the harpsichord and the piano. The Islamic world, in close touch with the West through the crusades and the Muhammedan conquest of Spain and Sicily, also provided oboes, trumpets, and small-sized kettledrums. Indeed, it presented the Christian world with the ordinary military drums and the tambourine, which had had no place in older European music.

The instrument that, according to literary and pictorial sources of the time, was, more than any other, in the center of musical life, was called *vièle* or *vielle* by the French and *fiddle* by the English (whence, later, *viola*). The reader will find illustrations in plates XIV and XVII in the author's *History of Musical Instruments*, pages 140 and 188.

Built in the size of a modern viola or even larger, the *vièle* was oftenest guitar-shaped, had a peg arrangement different from that of the violin ('frontal'), and was as a rule provided with five strings. We even know how the fiddlers tuned them. Jerome of Moravia, a Dominican friar who lived in Paris around 1250, relates that they did it in three ways:

$$\begin{array}{l} d \ G \ g \ d'd' \\ d \ G \ g \ d'g' \\ G \ c \ g \ d' \end{array}$$

As a hangover from the Orient, the *d* in the first two tunings was an unstoppable drone to be plucked with the thumb while

the other strings were being bowed. The two d' in the first tuning stand without doubt for one double string, and the same is probably true of the group Gg in the two first tunings. As a consequence, the three tunings must tentatively be reduced to:

$$\begin{array}{c} g \ d' \\ g \ d' \ g' \\ G \ c \ g \ d' \end{array}$$

METER AND MENSURAL NOTATION.







Before passing to polyphony, it must be made clear that any elaborate coincidence of several voice parts—two, three, or more—was impracticable without a careful organization of some kind. In the earlier *órganum*, the *vox principalis* held a note until the *vox organalis* had finished its *coloratura*, and then proceeded to the following note. The new style of polyphony, which will be discussed anon, required a more organic integration in the progress of the voice parts and found it in the concept of poetical meter, where syllables, long and short, were arranged in ever recurring, similar patterns, or feet, with a breathing spell at the end of a line.

A voice part in the polyphony of the thirteenth century proceeded in exactly the same way. Long and short notes were arranged in similar patterns—trochaic, iambic, dactylic, anapaestic, spondaic, or tribrachic. The patterns were uninterruptedly repeated (as in oriental music) until some rest marked off a section. The number of repetitions within a section was indicated by *primus ordo* for the solitary, unpeated pattern, *secundus ordo* for one repetition, *tertius ordo* for two repetitions, and so on.

However, musical conditions caused difficulties unknown to the poets. Polyphony, for which the patterns were created, combined not only different voice parts, but often different metrical patterns to enhance their independence. But a combination of trochaic or iambic with dactylic or anapaestic pat-

terns was not immediately possible, since the former two contained a long and a breve, or three time-units each, and the latter two, a long and two breves, or four time units each. As a way out, the dactyl and the anapaest were awkwardly stretched out to two times three or six units, three for the long syllable, and three, in the exact likeness of the iamb, for the two short syllables, the second of which was twice the size of the first.

The result was an official system of six metrical *modi*, in which all patterns, established on a three-unit basis, could perfectly well be combined.

| | |
|----------------------|---|
| Modus 1 (trochaic) |  |
| Modus 2 (iambic) |  |
| Modus 3 (dactylic) |  |
| Modus 4 (anapaestic) |  |
| Modus 5 (spondaic) |  |
| Modus 6 (tribrachic) |  |

This strict rhythmization, however, applied only to polyphonic music, to *órgana*, conducts, and motets. It did not apply to monophonic music, to the Gregorian chant or to troubadour melodies, nor, in general, to any music before 1150 or after 1300.

While plainsong notation with its neglect of time-values was still being used for monophonic melodies, the complicated three and four voice-part polyphony of the Church needed a measuring, 'mensural' notation to secure the necessary coincidence of the singers.

Mensural notation developed around 1225 from plainsong notation by distinguishing between a stemmed square, as the *longa*, and a stemless square, as the *brevis*. The corresponding rests were a longer vertical dash across two spaces of the staff and a shorter vertical dash between two lines. The two forms of notes, of which the breve still occurs as the symbol of an $8/4$ note, indicated at the beginning the rather brief values of a long and a short syllable in cantillation, that is, of a modern quarternote and a modern eighthnote.

The long and the breve were sufficient as long as polyphonic music clung to the first and second metrical modes. But with the adoption of the third and fourth modes, composers were confronted with two different sizes of longs, one of three and another of only two time-units, and in a similar way with two different sizes of breves, one of two time-units (like the smaller long) and another with only one time-unit. There were altogether four values of notes but only two symbols and two names. And, worse, the smaller long was actually the equivalent of the larger breve. This situation is at first sight unintelligible. Why not four or, better, three names and three symbols for as many values? The explanation is the irresistible spell of poetic meters from which the metrification of music had started. For a long time to come the poetic conception of syllables as nothing but long or short obstructed the seemingly normal way to an unequivocal notation and terminology on the basis of time-units.

With such equivocation, the mensural script in its older forms could not be read immediately, but only after the reader had carefully scanned a piece as a whole and found out what *modus* was intended. This imposition, incomprehensible from our modern viewpoint, must however have been acceptable in a time that cherished double meaning, enigmatic disguise, and esoteric mysteries in all the arts.

Some progress was made about 1250 with the introduction of a third symbol, the diamond-shaped *semibrevis* with its rest in the form of the modern 'whole' rest. Coincident with this was a momentous shift in the time-values of the older two symbols: the long drew nearer the modern halfnote, the breve became approximately an equivalent of the modern quarternote, and the semibreve, of the modern eighthnote.

Reading was facilitated in the second half of the century when Franco of Cologne, the author of an influential treatise on the *Ars cantus mensurabilis*, assigned definite (relative) time-values to the various conventional forms of ligatures, such as breve-long, or long-breve, or long-long-breve. This, too,

meant emancipation from the tyranny of the metrical *modi*.

The end of the century found even the semibreve insufficient to indicate the shorter values that the composers needed. Thus, the Frenchman Pierre de la Croix, or, latinized, Petrus de Cruce, subdivided the breve into four, and later even into nine semibreves, which, without for the time abandoning the name and writing-form of the semibreve, meant going beyond this smallest unit and preparing the acknowledgment of a still smaller unit, the *minima*.

The slow development of the mensural script, which eventually became our modern notation, will not be discussed at this place.

The arrangement of polyphonic voice parts in notation was not unlike the modern vertical score with the parts in strict coincidence above each other. The score, however, was given up during the thirteenth century in favor of the so-called choir-book arrangement, which lasted far into the Later Ages. The voice parts were written after each other on two consecutive sides of the opened book, generally with the two upper voices on the top of the left and the right pages, and the one or two lower parts at the bottom, so that all the singers were able to read their parts from the same book:

| | | | | |
|---|---|----|---|---|
| 1 | 2 | or | 1 | 2 |
| | 3 | | 3 | 4 |

The word choirbook, however, is misleading. The polyphonic forms—at least motet and *órganum*—were meant for soloists, not choirs, and the choirs themselves were supposed to sing from memory, not from the book.

POLYPHONY was increasingly dominated by strict mensuration in the patterns provided by the metrical *modi*. Indeed, the thirteenth century introduced a special name for all polyphonic forms subject to such mensuration: *discantus* (the same spelling in the singular and the plural).

The transition from free to measured polyphony occurred in the *Ars antiqua*. This was the name that the later Middle Ages gave to the musical styles before 1300. Although there has been disagreement as to how far back the term should be applied, it is generally accepted today as including the second half of the twelfth century. This means coincidence with the early and the central period of Gothic art and with scholasticism in philosophy.

In the center of the *Ars antiqua* stood the body of music connected with the cathedral of Notre Dame in Paris. Its first monument was the *Magnus Liber Organi* or Great Book of the Organum, a collection of about ninety *órgana*; and its earliest master was Leoninus who, in the enthusiastic report of a contemporary English tourist, was called an *óptimus organista*, that is, an excellent contrapuntist (not organist).

Leoninian *órgana* were sung at festive Masses and Offices to replace the plainsong of the soloist in Graduals, Alleluias, and other responsorial sections. All the choral phrases of such sections were unchangeably chanted in the plainsong unison of the choir.

Within the organal parts, the upper voice, or *duplum*, was performed by a solo singer, and the lower one, or *tenor*, possibly also by a solo singer or, more probably, by an instrument, by preference an organ mixture. In these respects, the *órganum* of Leoninus did not differ from earlier *órgana*. But the dimensions had grown. Since the *duplum* flowed in ever freer and longer coloraturas, the *tenor* stretched out to solemn, long-held pedal notes, which often would drone for more than a dozen (what we would call) bars and thus exclude any actual perception of its melodic progress (plate III).

However, the growing trend towards a strict mensuration took possession of even so free a form as Leoninus' *órganum* was: from time to time, the master interrupted its boundless flow by a *cláusula* in *discantus* style. In these episodes, the *duplum* was subjected to one of the modal meters—iamb, trochee, dactyl, or any other—and even the *tenor*, aroused from

its torpor, joined the strictness of the duplum in shorter, even strides, one to every metrical foot (AS 65 A).

Leoninus found a worthy successor in Master Perotinus, whom admiring contemporaries called the Great. Characteristically, the anonymous English traveller described him, in contradistinction to Leoninus, as an *optimus discantista*, which epithet testifies to a victory of the spirit manifested in Leoninus' *discantus* parts with their greater strictness. Deploying "an abundance of color and beauty," the Britisher said, Perotinus replaced many of Leoninus' *cláusulæ* by richer ones. But even outside the *cláusulæ*, in the *órganum* proper, the younger master forced the duplum into an exact, consistent meter (plate III) and often added a *triplum*, or third part, indeed a *quadruplum*, or fourth part. Thus he increased the number of voice parts, with the third part, or the third and the fourth, joining forces with the duplum against the tenor (cp. Perotin's *órganum triplum* on AS 65 B).

A Perotinus *órganum triplum* or *quadruplum* would start on a long drawn-out chord. While the tenor holds on, the two or three upper voices proceed in clear-cut phrases instead of the older free coloraturas. They also proceed in an even meter, iambic, or trochaic, or dactylic, all at the same time and coincident, save for a few passing-notes. Melodically, however, they follow their own devices, so that, except for the strictly consonant cadences, all kinds of dissonances occur. Still, there were beginnings of coördination and melodic coherence. Excepting the canons of primitive tribes, we find in Perotin's *órgana* the earliest 'imitations,' that is, repetitions of some melodic phrase in other voice parts, which eventually, four hundred years later, led to the fugue.

The tenor, however, participated in the play of the upper voices only in the *cláusulæ*. In the purely organal sections, it was still more stretched out than in Leoninian *órgana*; it might happen that forty or more measures were supported by the same almost endless note of the tenor. In view of such unnatural length, one must indeed consider the coöperation of an in-

strument rather than of a solo voice; and among the instruments at hand the only suitable one, again, would be the organ, which, as we recall, was a mixture organ without solo stops. The only possible alternative seems to be that a singer sustained the notes as long as he could and then simply waited until the next one fell due.

MOTET AND CONDUCT. The *órganum* had an offshoot which proved to be the most important polyphonic form of the thirteenth century: the motet. It originated when the counterpointing voice or voices of the *cláusula* abandoned the text of the tenor, or *mot* ('word'), and sang a *motet*, or 'little text,' of its or their own. When the separation of the old and the new form had been perfected, the name *motet* passed from the text of the counterpointing voice to the whole form. Motets were 'single' if they hailed from two-part *órgana*, 'double,' if from three-part, and 'triple,' if from four-part *órgana*.

The tenor of a motet was left either to an instrument or to a vocalizing voice. It had no text but the *incipit*, that is, the first word or words of the passage in the liturgy from which the melody was taken. In a strange way, this melody was bent into regular groups of three units with a subsequent rest instead of a fourth unit. Sometimes such a melody was long enough, with its groups of four units, to cover the motet in its full length; sometimes it covered only half or a third of it, so that it had to be repeated once or twice. Sometimes, again, the section from the liturgical melody was so short that it formed an ever repeated ground or *ostinato*.

The vocal upper voices, generally two, had originally one text and one meter, but later were given different meters and texts. Different texts, however, expressed ideas similar or closely related. The first voice would sing *Ave virgo regia mater clementiae*, and the second, *Ave gloriosa mater Salvatoris*. The

texts were not necessarily sacred. Many motets had secular texts, against the ecclesiastical melody of the tenor. Indeed, it happened that the texts were sung in different vernacular languages, in French, German, and English.

Thus, the motet could be polyphonic, polyrhythmic, polytextual, and polyglot. It was, in a typically Gothic way, unified in the spirit rather than in appearance. And typically Gothic also was the role of the tenor. It never formed a well rounded melody, but rather a solid structure of equal, evenly spaced blocks to support the lighter texture of the upper voices.

The *conductus*, first mentioned around 1140, was a third type of early thirteenth century polyphony. It had two, three, or four voice parts, the lowest of which sang a Latin text on a freely invented, not liturgical melody, while the other voice parts—probably instrumental—accompanied ‘homorhythmically,’ that is, in chords exactly coinciding with the notes of the melody. The meaning of *conductus* is not quite clear; the current interpretation derives it from ‘conducting’ the priests in processions.

To summarize: the polyphony of the thirteenth century crystallized in three principal ways of writing:

Conductus, with one text and one meter (As 71, 99).

Organum, with one text and different meters (As 71, 99).

Motet, with different texts and different meters (As 65).

Most of these polyphonic forms differ from modern polyphony in one essential point: the voice parts are not meant to represent the human ranges from the soprano down to the basso, but, instead, often keep within a similar range. They are *aequales*, to use a term well known from Beethoven’s pieces for trombones of equal size. As a consequence, the impression is much lighter and less suggestive of spatial depth. In the twelfth century, a momentous influence on polyphony had come from the English *gymel*, or *cantus gemellus* (‘twin song’), in which the melody was accompanied by quasi-parallel, now major now minor, sixths and thirds. Both intervals ob-

tained, around 1200, their official recognition as *optimae concordantiae*, and soon found their way into continental forms of polyphony. Still, they were only timidly used for a long time to come.

The two new *optimae concordantiae* were combined to make triads in the *English discant*, in which some Gregorian melody was accompanied by parallel thirds and sixths above to form a trio. The three singers, performing a *discantus supra librum*, or counterpoint from the book, sang from the same one-staff notation, the first singer as it stood, the second in *meane-sight*, a third higher, and the third in *treble-sight*, a sixth higher. There was an exception only for the first and the last note of a piece; these were accompanied in the fifth and the octave, to make the beginning and the end perfectly consonant.

This way of singing, however, must not be confused either with the free counterpoint known as the French discant (cf. page 94) or with the *fauxbourdon* of the fifteenth century, which will be discussed later.

THE FIGHT for a consonant third seems to have been the cause of decisive changes in the medieval and post-medieval scale. So far, the Middle Ages had followed the 'cyclic' system with its perfect fifths and fourths (cf. page 17). Its third was the result of superimposing four fifths—as C-E by going from C to G, D, A, and E. This meant, mathematically $3/2 \times 3/2 \times 3/2 \times 3/2$, or 81:64. Simpler, and therefore more consonant, was the third that the 'divisive' system provided: 5:4 or 80:64. However, a simple change from the cyclic to the divisive system would not have been feasible; it had the disadvantage, unbearable in polyphonic music, of exacting two different sizes of tones from the player and from the listener, such as C-D in the ratio 9:8 (or 204 cents) and D-E in the ratio 10:9 (or 182 cents).

The important *Speculatio musicae* of the Englishman Wal-

ter Odington (c. 1300) shows that, as a way out of this dilemma, the thirteenth century achieved the earliest 'temperament,' or wilful alteration of the scale, that we find in the western world. The 'divisive' third, 5:4, was accepted, but cleft into two equal tones. The reader desirous of figures will easily realize that the tone was given (approximately) 386 cents divided by two, or 193 cents, as against the 204 and 182 cents in the orthodox divisive system.

These are the beginnings of the later 'mean-tone' temperament which, before and along with the equal temperament, lived far into the nineteenth century.

READING: Gustav Reese, *Music in the Middle Ages*, New York, 1940. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 14. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Sections 1140-1265. Willi Apel, *The Notation of Polyphonic Music, 900-1600*, 3rd ed., Cambridge, Mass., 1945. Heinrich Husmann, *Die drei- und vierstimmigen Notre-Dame-Organa*, Leipzig, 1940.

LISTENING: 2000 Y 2. AS 16, 18, 65, 71, 91, 99.

THE LATE GOTHIC PERIOD

1300-1400

A MOMENTOUS CHANGE occurred in Europe early in the fourteenth century. The authority of both the Church and the Holy Roman Empire weakened; the cities, the burghers, the common people came to the fore; and the arts turned to depicting the realities of earthly life beside the myths of heaven. A writer on music about 1300, the Frenchman Johannes de Grocheo, dared, as the first one, to discuss the *musica vulgaris* of Paris, with its songs and dances, along with the dignified chant of the Church. The age-old barrier between the popular and the 'higher' music had been taken down.

Alas, the Church had reason to resent the merger. Pope John XXII, in a famous bull of 1324, denounced the artificial meters, new melodies, notation, rapid tempi, ornaments, rests, polyphony, and secular tunes of the 'modern' school, and made them responsible for the alarming distraction, intoxication, and perversion of the devotees.

Exactly who and what these objectionable moderns were is not quite clear; 'new' and 'modern' have always been poor targets, for the attackers as well as for the defenders. Did the Pope have in mind the motets of Petrus de Cruce, who, freed from the tyranny of metrical *modi*, had written in an almost rhapsodic polyphony on the threshold of the century? Or did he think of his French contemporary, Philippe de Vitry, who

was much stricter in style and even reverted to the *ordines* of the *ars antiqua*?

All the same, Philippe de Vitry (c. 1325), whom Petrarch has called "the greatest, the only poet of the age," was the most influential composer of the early fourteenth century and a particularly modern one in his disregard of unadulterated church modes—"musica ficta is the musica vera" (cf. page 116), he said—and in his acceptance, in polyphony, of the futuristic thirds and sixths, which even as progressive a musician as Johannes de Grocheo found rather "hard on the ears."

Polyphony—and this is another aspect of the reconciliation of the ecclesiastic and the secular styles—had conquered all the domains of music, the secular as well as the religious sphere. No doubt, the beginnings of such an all-comprehensive practice must be sought in the thirteenth century. Some dances of that time had indeed a second or even a third part written down. But as a rule, such accompaniment must have been done without notes and often at random. The fourteenth century, on the contrary, took polyphony seriously enough to elaborate the voice parts in its secular forms as much as in its Masses, motets, and conducts.

One of these secular, popular forms, which Grocheo defines as "bending back on itself like a circle," was the *rotundellus*, *rota*, or *rondellus*, a familiar type of piece like our *Row, row, row your boat* or the almost global *Brother John*, which we officially call a canon, and colloquially, a round. The structure can be represented by the following graph:

| | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| First voice: | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | . | . | . | | | |
| Second voice: | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | . | . | . | | |
| Third voice: | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | . | . | . | |
| Fourth voice: | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | . | . | . |

Again and again four voices sing the same short melody of four measures, but enter with a delay of one measure each, which is easily feasible if the four measures are devised to be harmonically and contrapuntally consonant. As a variation, all

voices may start together with the appropriate measures, so that the entries are shifted, not delayed:

| | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|
| First voice: | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | . | . | . |
| Second voice: | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | . | . | . |
| Third voice: | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | . | . | . |
| Fourth voice: | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | . | . | . |

In the thirteenth and fourteenth centuries, popular canons were written down—and therewith officially recognized—in Germany, Spain, and England. A German *radel* ('wheel') dealt with a St. Martin's goose, the Spanish *caças* (or 'hunts') were devised for pilgrims wandering to the shrine of Montserrat in Catalonia, and one from England is commonly known by its text words *Sumer is icumen in*, *Lhude sing cucu* (Summer has come, loudly sing cuckoo), a catchy dance tune for four voice parts upon a *pes* (a foot or fundament) of two additional voices moving in a *ground* or *ostinato* form. Incidentally, Dr. Manfred Bukofzer, professor at Berkeley, has corrected its musical text in the light of a recent study of the original.

Out of the popular canon, the French created one of the most amazing art forms of the fourteenth century, the *chace*, and the Italians followed with the similar *caccia*.

THE *CHACE* (pron. shahss) of the French was a lengthy canon in unison, that is, with the voices following each other at the same pitch and in the same key. The two voices entered at a distance of at least four measures from each other and proceeded straight-away, without any repetition and without—to requote Grocheo's words—bending back on themselves "like a circle." An ingenious, amusing example of an anonymous master is recorded on AS 59 A.

The Italian *caccia* (pron. kahtchah), whose name again denotes hunt, was similar in pattern, but had an instrumental *pes* in longer notes which served as a supporting bass. An example by Master Ghirardellus is recorded on AS 59 B.

Both the texts and the melodies of these straight-away canons were in the naturalistic taste of the age. They depicted with gusto the sports of hunting and fishing in every detail, and also fire alarms, market scenes with voluble bargaining, and the characteristic cries of street peddlers.

Such is the curious *caccia* of Master Zacharias of Florence. The poet abandons the usual sequence of eleven syllables and uses a genuine prose. A hunter suddenly finds himself in the noisy tangle of a market: "Crabs, new crabs!—Give me crabs for two!—Let us first take the shells off!—I want five!—Ann, go peel them!—I don't want any!—Good lemons!—Are they really fresh?—How much?—A nickel!" At the last, a tooth-puller recommends his services. The music, quite informal, follows the syllables faithfully; now high now low, the cries and questions and answers, talk and backtalk leap from voice to voice, without a conventional, clean-drawn melody and often in a one-note *parlando*, or patter. This is the oldest example of markets in music, a predecessor of Janequin's *Cris de Paris* in the sixteenth and Richard Deering's *Cries of London* and *County Cries* in the seventeenth century, of Gustave Charpentier's opera *Louise* (1900) and Ralph Vaughan Williams' *London Symphony* (1914). And we can safely assume that giant canons of this kind gave their contemporaries the same delight that we ourselves experience when a familiar subject is treated with the utmost economy of means in a few masterstrokes, with humor and spirit.

The leaping from voice to voice that talk and backtalk, question and answer required was technically known as *hoquetus* or *hocket*, 'hiccup,' a kind of openwork writing in which, in rapid alternation, a scrap of melody in one of the voices concurred with a rest in the other one. It is quite probable that the hocket was due to the same impulse to dissolve coherent masses and surfaces that urged the architects of later Gothic times to disintegrate their walls and spires into lace-like openwork.

The *caccia* is characteristic of the revolutionary changes in

the later Middle Ages. Side by side with the emancipation of secular, popular art, we witness the liberation of rhythm from the straitjacket of the metrical *modi*, and its rapid evolution to modern freedom and characterizing power, indeed, to ultra-modern refinement and syncopation in what Philippe de Vitry proudly called the new art, *ars nova*.

Coincident with this liberation, we witness the emancipation of the Italian spirit from the fetters of Gothic mentality.

For many a hundred years, Italy had been taking rather than giving. But around 1300 she began to compete with France, and, in less than a hundred years, won so thoroughly that, while French art in the fourteenth century, with a few exceptions, is known to historians only, the contributions of Italy are still a part of our life, whether we think of Dante's gigantic *Divina Commedia* or of Boccaccio's audacious everyday tales, of Giotto's solemn frescos or of Simone Martini's lovely Virgins.

Music had an important part in this shift. True, the French composers of the *ars nova* were godfathers to the new Italian music. But the young Italians went their own way; little connected them with the culture of Paris, and nothing with the unworldly seclusion of Gothic art and scholasticism. Their songs were as realistic as was their painting. They dealt lovingly with life and nature, and neglected the realm of religion about as much as the preceding century had failed to heed the claims of the secular sphere.

But above all, the Italians turned their backs on the horizontal, anti-sensory polyphony of the Gothic age and consequently also on the *tenor*, or *cantus firmus*. The one or two accompanying voice parts were almost meant as harmonic supports—indeed, as basses in a modern sense.

THE TWO MAIN FORMS of Italian music besides the *caccia* were *ballate* and madrigals. The *ballade* and the *rondeau* were left to the French.

Madrigale, as a name, has as yet no certain derivation. Madrigalesque poetry was idyllic, bucolic, meditative.

As a form, the madrigal had, as a rule, two or three stanzas, each of three lines, with the same melody. The whole madrigal ended in a *ritornello*, which was not a refrain but a kind of *Abgesang* (cf. page 86) with a new melody in a different rhythm.

| | |
|------------|-----------|
| Stanza I | melody I |
| line 1 | |
| line 2 | |
| line 3 | |
| Stanza II | melody I |
| line 4 | |
| line 5 | |
| line 6 | |
| Ritornello | melody II |
| line 7 | |
| line 8 | |

Madrigalesque music, written in two or even in three voice parts, was full of daring coloraturas in the upper voice, while the one or two accompanying parts were played on instruments in an almost harmonic, chordal spirit.

This early madrigal must not be confused with its very different namesake in the sixteenth century.

The Italian *ballata*, unlike the French *ballade* and rather like the *virelai*, was a chain of stanzas with refrains before, between, and after them. There were two melodic sections: one for the refrain, or *ripresa* ('take up'), and the other for each of the two first pairs of lines in the stanza, the third pair anticipating the melody of the following refrain.

| | | | |
|----------|---|---|---|
| stanza: | B | B | A |
| refrain: | A | | A |

All these forms were aristocratic chamber music, to be sung and played by educated amateurs. Some pieces must have been great favorites, to judge from the copies extant. One

ballade by Pierre de Molins (AS 59) has been preserved in no less than six manuscripts of the time and, besides, on a figured tapestry, in the hands of an elegant gentleman who sings it to the accompaniment of a small-sized harp.

Church music played a minor role among the fourteenth century Italians. The spiritual world found its musical expression less in liturgical than in extra-liturgical, popular forms, such as the hymns of devotional fraternities in Italy, or *laude*—of a cast very close to the *ballata*—and of penitential brotherhoods—the flagellants—in Germany.

TWO UNUSUAL MEN emerge from the mass of eminent composers of the time: the Frenchman Guillaume de Machault and the Italian Francesco Landino.

Guillaume de Machault (or -aut, pron. mahshów), who lived from about 1300 to 1377 as a contemporary of Petrarch, must be considered the greatest musician of the fourteenth century and one of the century's greatest geniuses in any field. A versatile spirit—cleric, courtier, poet, and composer—he served three rulers, John of Luxembourg (king of Bohemia), John of Normandy, and King Charles V of France, became a canon, wrote a number of outstanding epic poems, and was the musical leader of the Flamboyant Gothic.

He left a good many pieces of aristocratic chamber music—*ballades*, *rondeaux*, and *chansons balladées*, or *virelais*—in a refined and often over-sophisticated style which marks the ending of an age rather than a fresh beginning. While his *ballades* and *rondeaux* have two or three and even four voice parts, most of the *virelais* are unaccompanied melodies. But we learn from a letter addressed to Machault that two of them could be coupled as double *virelais*. AS 67 has recorded a *ballade*, a *double ballade* (with two *cantus* parts and two texts), and a *virelai*.

In the religious field, Machault has a unique place, with

many motets and a powerful Mass, of uncertain date, in an archaic, isorhythmic motet style (cf. page 115), in fact, the earliest complete Mass ever composed by a single man. AS 31 and 32 record its *Credo*, *Sanctus*, *Agnus*, and *Ite* (the latter being an unusual addition in polyphonic Mass compositions).

Francesco Landino, or Landini, was born in Fiésole near Florence in 1325, went blind as a child, learned composition and the technique of several instruments, among which he favored the portative organ, was awarded the laurel crown of the *poeta laureatus*, and, admired and honored as few musicians had been before him, met his end at Florence in 1397. Of the more than one hundred and fifty works that he left, AS has recorded the beautiful *ballata* with the wide-spanned refrain *Gram piant' agl'occhi* (no. 63).

Landino's name has been connected with a certain type of cadence, or concluding formula, in which the 'leading' note does not precede the final tonic directly, as B-C, but indirectly via the sixth, as B-A-C. He was by no means the first one to use it, though, and the formula may even go back to the old inherited northern chain of thirds discussed on page 67.

INSTRUMENTAL MUSIC was essentially restricted to dance melodies:

The *estampie* (AS 16), a solemn gliding dance in 12/8 beat consisting of four or five different periods, or *puncti*, each of which was played twice, the first time with a semi-cadence, and the second time with a full cadence.

The *saltarello*, a vivid stepping dance either in triple time (Italy) or in duple time (Germany), with or without an up-beat.

The *trotto*, a form of *ballata* in imperfect *tempus*, that is, in duple time.

The energetic turn, so strikingly characteristic of the four-

teenth century, away from the horizontal polyphony of the earlier Middle Ages towards a vertical, harmonic conception of music is neatly reflected in the creation of keyboards. For keys are prompted and justified only by the need of playing at least two notes or voice parts at the same time although no different tone-colors set them off against one another. Such playing, which necessarily resulted in vertical chords, or, in other words, in the blending of notes perceived simultaneously, was acceptable only in times that tolerated or even favored such a novel conception.

The organ had been given keys instead of its older, clumsy sliders as early as the thirteenth century.

Stringed keyboard instruments, precursors of the modern piano, followed at least at the beginning of the fourteenth century. The *Musica speculativa*, that the Frenchman Jean de Muris is said to have written in 1323, mentions not only one but various kinds of them; among them is a clavichord with nineteen strings and another stringed instrument, evidently plucked, in the shape of a grand—that is, a harpsichord.

The *clavichord* (plate XIV)—literally a monochord with *claves* (Latin, 'keys')—had wire strings stretched from right to left within a small and shallow rectangular box three feet long and one foot deep. Each key had on its after end an upright metal tangent which, when the key was being pressed, would gently touch the string and thus produce a weak but charming tone. Its soulful character could even be enhanced by a violin-like *vibrato*, which the Germans later called the *Bebung*. It consisted of a shaking touch of the key and resulted in a rapidly changing tension of the string.

The harpsichord and its nearest relatives, on the contrary, were plucked by tiny, thornlike pieces of quills, which projected from 'jacks,' or wooden hoppers, kept loosely upright on the after ends of the keys and tossed toward the strings when the keys were pressed (cf. the illustration on page 334 of the author's *History of Musical Instruments*).

There were three forms of plucked keyboard instruments:

(1) Upright, with the vertical soundboard facing the audience.

(2) The grand form, with the strings running from front to back, which was later called *harpsichord* in English, *clavicémbalo*, or, abbreviated, *cémbalo*, in Italian, and *clavecin* in French (cf. plates XXI and XXIV in the book cited above).

(3) The square form, with the strings running from right to left (as in the clavichord), which later was called *virginal* or *spinnet* in English, *spinetta* in Italian, *espineta* in Spanish, and *épinette* in French.

The word harpsichord, however, did not appear before the seventeenth century; the term virginal—which does not derive from the Maiden Queen Elizabeth—stood in Tudor times for both the square and the grand form. Incidentally, the official form was *virginals*, in the plural, or even a *pair of virginals*, the word ‘pair’ denoting, not a couple, but one set of any number of parts; the fifteenth and sixteenth centuries understood the instrument as a set of individual tone-producing units, as, for instance, the C key with the C strings, the D key with the D strings, and so on. Furthermore, the virginals were very often described, in those centuries, as ‘single’ or ‘double.’ These enigmatic epithets did not stand for instruments with one or with two keyboards. They referred rather to their musical range. English notation indicated the octave below great G (on the lowest line of the F clef) by double letters—FF, EE, DD, and so on. A single virginal did not and a double virginal did reach down into the double-letter octave.

In a similar spirit, the Italians distinguished between a *clavicémbalo* and a *gravicémbalo*. The latter descended to those notes that the Middle Ages already had called the graves—from A to a.

Almost in the same year, 1323, in which the *Musica speculativa* of Jean de Muris mentions stringed keyboard instruments for the first time, a manuscript in the British Museum (the Robertsbridge Codex, c. 1325) records the earliest intabulations, or tablatures (cf. page 24), for keyboard instruments

of motets and estampies. To be sure, the choice of the keyboard instrument—whether clavichord, virginals, or organ—was up to the performer.

In almost four hundred years, right into the time of Bach, the northern organ was, indeed, to share its music with the stringed keyboard instruments. And this it was able to do because in the fourteenth century, the most fateful span in its history, it began to equal the virginal and the clavichord in agility and to outdo them in coloristic possibilities. By the end of the century, some organs already had two manuals and a pedal keyboard and, for the first time, characteristic, colorful solo stops, such as 'flute' and 'trumpet,' against the tinkling, uniform mass of its mixtures. Guillaume de Machault could rightly call the (northern) organ of his time "the king of all the instruments."

The invention of pedals is indicative of the special consideration that composers gave to the lower range of music, as always in dynamic times. We find it also in the bass shawms (somewhat like our modern baritone oboes), which were mentioned in 1376 as something novel.

NOTATION. The novel musical language of the time was beyond the means of the older, Franconian script and the rigid modal principles of the thirteenth century. The freedom and unprecedented authority of secular music and the rights accorded to duple time along with the typical triple time of the bygone era caused a revolution in the mensural script that one of its strongest promoters, Philippe de Vitry, proudly called the *ars nova* (plate IV).

The *ars nova* consisted mainly of two momentous innovations: the introduction of smaller time-values and a wider scope of rhythmic expression. The new time-values were the *semiminima*, the *fusa*, and the *semifusa*.

Their mere existence implied a general shift in time-values.

The older units became slower: the long was drawn-out to the length of a modern moderate wholenote; the breve, to a modern halfnote; the semibreve, to a quaternote; the minim, to an eighthnote. The standard was the semibreve at approximately 60 MM.

The greater subtlety in rhythmic expression showed in the red, and later, black, color of certain notes, which allowed for indicating triplets and kindred shifts in meter. But the most important concept was the possibility of subdividing each time-unit into either two or three smaller units. This system can be conveniently represented in only six lines:

| | |
|----------------------------|-----------------------------------|
| <i>Modus perfectus:</i> | the long equals three breves |
| <i>Modus imperfectus:</i> | the long equals two breves |
| <i>Tempus perfectum:</i> | the breve equals three semibreves |
| <i>Tempus imperfectum:</i> | the breve equals two semibreves |
| <i>Prolatio major:</i> | the semibreve equals three minims |
| <i>Prolatio minor:</i> | the semibreve equals two minims |

(A little mnemonic help: *m*Odus organized the *l*Onga, and *t*Empus the *br*Evis.)

The two *modi*, two *témpora*, and two *prolationes* each had its signature:

A figure 3 after a circle or semicircle stood for the perfect *modus*, and a figure 2 (generally omitted) for the imperfect *modus*.

A full circle stood for the perfect, and a semicircle for the imperfect, *tempus*.

A dot inside the circle stood for the major prolation, while the circle was left empty in the minor prolation. Hence:

C 3 is *modus perfectus*, *tempus imperfectum*, *prolatio minor*, or, in modern terms, $3/2$ rhythm.

O 2 is *modus imperfectus*, *tempus perfectum*, *prolatio minor*, or $6/4$ rhythm.

C 2 is *modus imperfectus*, *tempus imperfectum*, *prolatio minor*, or $4/4$.

⊙ is *tempus perfectum*, *prolatio major*, or $9/8$.

○ is *tempus perfectum*, *prolatio minor*, or $3/4$.

C is *tempus imperfectum*, *prolatio major*, or 6/8.

C is *tempus imperfectum*, *prolatio minor*, or 2/4.

The last sign, an empty semicircle, or C, has survived in our present notation.

One of the oddest traits of medieval notation was the inconsistent key signature within the same polyphonic piece. Often, the upper voice(s) was left without any signature while the lower part(s) carried a flat. No definitive explanation has been given so far. Still, the curious custom was logical in an age unwonted and unwilling to think in terms of harmony, common keys, or even common Church modes. Let us not forget that medieval musicians considered a contrapuntal composition to be the simultaneous progress of individual melodic lines. Even as late a man as Glareanus (1547) defined the Church modes of such individual lines, but never of a polyphonic composition as a whole. In such a composition, two clefs at the distance of a fifth (such as the mezzosoprano and the tenor clef) would easily suggest two hexachords (which after all were still in use) a fifth apart, such as the *hexachordum naturale* and the *hexachordum molle*; the first would require a natural B and the second a flatted B.

THE FRANCO-NETHERLANDISH 'artifices.' Even today, cheap music 'history' would scorn the later Middle Ages for having strangled the soul of music in contrapuntal tricks and artifices. This is a unilateral, illicit judgment characteristic of romantic periods, in which the works of art are so exclusively expected to aim at emotion that any stress on structure is deemed a misdemeanor and proof of superficiality.

The art of the later Middle Ages sprang from other sources and cannot be understood or judged by the standards of romantic aesthetics. Gothic music was calculated and constructed in the truest senses of the words, just as Gothic cathedrals were


calculated and shaped to display openly their structure from the basement to the finial of the spire—which was easily compatible with genius and inspiration, even if those words were not in the vocabulary of the time.

Thus, it would happen that an entire section of the Mass was written in a strict canon in unison, where the voice parts entered in a *stretto*, or 'narrow,' that is, at a small distance without waiting until the preceding voice had finished the theme (as in Master Dufay's *Gloria ad modum tubae*, recorded in 2000 Y). But even this was too simple a device. Composers often wrote 'crab' canons, where the second voice would read the melody of the first one backward, note by note, or 'mirror' canons, where the page was turned upside down, so that the notes were read not only backwards but also inverted (for example, a last note *f''* on the highest line of the staff would become the first note *e'* on the lowest line). Or else, one voice part would have the same notes as the second, but stretched out to double time-values, or, on the contrary, would have them compressed into halved values. Or each of four voices would sing the same notes, but in different rhythms. Guillaume de Machault once wrote a *rondeau* in which the second voice read the part of the first one backward while the tenor, with notes only up to the middle of the piece, supplied the second half by reading the first half backward.

In addition, the correct way of performing from a rudimentary notation was kept secret under enigmatic directions. Machault would notate a whole *rondeau* in one short line and expect the four performers to decode their parts, the cues being given in the words of the text: "My end is my beginning, and my beginning is my end . . ." Somewhere else, the singers would find the texts "Suddenly, they turned their backs on me" or "I am undone unless you redo me," and in all three instances, they knew that the solution of the puzzle was a crab canon.

The tricks themselves and their disguise were not meant to be funny. Nor must they be bunched together as anti-artistic

superficialities. Contrapuntal subtleties were the last fulfillment of the architectural, constructivistic mind that ruled the later Middle Ages, and their disguise was the reflection in music of the later Gothic trend to give works of art a secret meaning behind the outer, perceptible appearance and to reserve the key to the free-masonry of those initiated.

One of the artifices had nothing to do with riddles, but showed in a similar way a special interest in structure, even if the senses were little concerned. This was *isorhythm*, or 'equal' rhythm (AS 31, 32, 121). Deriving from the *órdines* of the thirteenth century (cf. page 91), it implied, in its simplest form, a characteristic pattern of longer or shorter notes, which ruled all the sections of a melody, without any change. This can easily be understood when we think of the metrical organization of the verse of the national anthem of the United States, which is a true rhythmical pattern forced upon the melody from phrase to phrase: 

But there was also a more complicated form of *isorhythm*: some melody repeated itself in equal sections (stanzas or verses) while the rhythmical pattern was shorter or longer than the melody and therefore did not coincide with the melody in its re-entries. If, for instance, the rhythmical pattern was one note longer, the melody, repeated for the first time, would set in on the last note of the not-yet-repeated rhythmical pattern, while its second note would be given the metrical value of the first note of the repeated pattern and consequently would shift the metrical values of all its notes by one digit. In its second repetition, the melody would set in on the penultimate note of the rhythmical pattern and hence would have all its metrical values shifted by two digits. All repetitions of the melody would have the identical sequence of pitches, but all in different time-values. It was one of the most intricate attempts at unity in variation, at variation in unity, in an obvious disdain of sensuous perceptibility.

MUSICA FICTA OR FALSA. The claims of polyphony, on the one hand, and the growing interference of secular music, on the other hand, were steadily disintegrating the white-key purity of the Church modes. To be sure, the so-called *musica ficta* or *falsa*, denoting the introduction of extra-modal flats and sharps either "by reason of beauty" or "by reason of necessity," had its seeds in the Church itself, where a B_b was introduced in the first and the fifth mode before an A (cf. page 57).

The two technical terms come from the thirteenth century. And so does the official recognition of B_b and E_b , and also of $F\sharp$ and $C\sharp$, which had become necessary in order to avoid tritones (intervals of three consecutive wholetones, like $F-B\sharp$). But men of the thirteenth century had also begun to sharpen the leading (seventh) note before the tonic in the spirit of the advancing major and minor modes.

In the fourteenth century, *musica falsa* became, as Philippe de Vitry emphatically stated, the *musica vera et necessaria*. Still doubtful in its grip on melody, it was the unquestioned principle that ruled progressions in counterpoint and harmony. Here are the most important rules:

(1) Diminished fifths, octaves, and twelfths that might originate in the current of voice progression must be made perfect.

(2) Thirds opening into fifths, and sixths opening into octaves, must be major.

(3) Thirds shrinking into unisons must be minor.

Since these simple, natural rules were self-evident in the later Middle Ages, the composers did not often care to indicate them expressly by sharps or flats. Many modern editors of medieval music, on the other hand, neglect to add the necessary accidentals because they want to preserve what they believe to be the authentic text. By such neglect, they create a ro-

mentally 'archaic' but falsified picture, of which our readers should be warned.

While the rules of *musica ficta* reflect a definitely harmonic conception, certain concluding formulas of the time disavow this attitude. The most important of these anti-harmonic features was the double leading note. Not only was the final octave preceded by the lower semitone, but the fifth, too, was reached from its lower semitone, so that the two voice parts formed strictest fourth parallels—a practice reminiscent of the gliding, bodiless 'sway' of contemporary Gothic statues, in which the two hips bulge in and out in a parallel movement (*cf.* the author's *Commonwealth of Art*, page 85).

READING: Gustave Reese, *Music in the Middle Ages*, New York, 1940. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 14. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Sections 1300-1400. Guillaume de Machault, *Musikalische Werke*, ed. Friedrich Ludwig, 3 vol., Leipzig, 1926, 1928, 1929 (the 4th volume, with the Mass, was never published). Francesco Landini, *The Works of Francesco Landini*, ed. Leonard Ellinwood, Cambridge, Mass., 1939.

LISTENING: AS, 1, 32, 59, 63, 67, 110.

8

THE AGE OF DUFAY

1400-1460

ON THE THRESHOLD between the fourteenth and the fifteenth centuries, between the Middle and the Later Ages, between the worlds of Machault and Dufay, a powerful British composer and astronomer, John Dunstable (d. December 24, 1453), led Gothic music to a last impressive culmination. His Masses, motets, and antiphons flowed forth in long-drawn, passionate melodies, but a typically English predilection for the consonances of the third and the sixth and for a sensuous, full-set harmony gave them a denseness as uncontinental as that of the massive cathedrals of his country. Still, he was neither fully Gothic nor fully English. In the years that he probably spent in France, he made himself familiar with continental up-to-date techniques, with isorhythm and ornamental *cantus firmi* in the upper voice. Many of his works, indeed, acquired European fame, among them the isorhythmic motet *Veni creator spiritus* and the chanson *O rosa bella*.

The Renaissance—in the narrowest sense of the word—began in the early fifteenth century, in music as well as in the other arts. How great the new birth was, how deeply the contemporaries felt that a new age had dawned, can be read from an audacious statement in the *Liber de arte contrapuncti* of the Flemish musician Johannes Tinctoris (1477): “There is no music worth hearing save only in the last forty years.”

The word Renaissance seems to suggest a basically retrospective movement, namely the rebirth in form and spirit of classic antiquity. But the study of Greek and Roman authors, sculptures, and architectural ruins was hardly more than auxiliary within an infinitely wider scope of re-orientation. Actually, *rinascimento* implied a rebirth of the Italian spirit after centuries of 'Barbarian,' 'Gothic' thought and form, and its ultimate goal was liberation from the fetters of the Middle Ages. Boldly, it established the right of the senses against the spirit, the right of personal experience and judgment versus authority, and hence, the right of individual against collective mentality.

Since this reaction against the spirit of the Middle Ages was at the same time a reaction of the Italian or Mediterranean against the Germano-Celtic spirit of the North, it showed in the arts as a victory of the classic ideals of balance, clarity, simplicity, and strictness in structure.

This occurred in architecture, sculpture, and painting, and it occurred in music, too. Only, the musical situation was rather unusual, for Italy concentrated on the visual arts with so much energy that in a hundred and fifty years she was not able to produce one single composer of world renown—not a single one between Landino and Palestrina.

The gap was filled by a long and steady importation of masters from Burgundy and the Netherlands who, while serving in the princely chapels of Italy—in Rome, or Venice, or Florence—adapted their native Gothic styles to the taste of the Italian Renaissance.

In making this statement, it should be explained that most singers in the princely chapels of that time were outstanding composers with an all-around musical education, and also that the number of members was small. The Papal Chapel in Rome had, in the time of the Burgundians, in 1436, not more than nine singers, but grew to have twenty-four by the end of the century.

The outstanding monument erected to the music of that

time is the gigantic anthology known as the Trent Codices, once preserved in the cathedral of Trent in the Tyrol and now partly printed in the *Denkmäler der Tonkunst in Oesterreich* (the official publication of outstanding older music in Austria) in volumes 7, 11 i, 19 i, 27 i, 31, 40. They consist of seven manuscript volumes written not long before 1500 for a music-loving Austrian bishop and contain nearly two thousand compositions of some seventy composers of the fifteenth century. Among them is a substantial part of the work of the generation which, coming from Burgundy, gave its genius to Italy and accepted the spirit of the Renaissance in return.

THE BURGUNDIAN LEADERS were Binchois and Dufay.

Gilles Binchois (pron. -shwah), born about 1400 in the province of Hainaut, was at first a soldier and only later became a singer in the famous chapel of Duke Philip the Good of Burgundy. He died outside of Burgundy, at Lille in France. A few of his works belong in the spiritual sphere, but most are smiling, amiable melodies in the traditional secular forms of the *rondeau*, the *ballade*, and the *chanson*. AS 39 has recorded one of his delightful *rondeaux*.

Guillaume Dufay (pron. -fahee), born about, or rather before, 1400 in the Franco-Netherlandish borderland, started out as a choirboy at the cathedral of Cambrai in northeastern France, which, according to a contemporary letter, surpassed all other churches of the world in the beauty of its singing; and he died in 1474 as a canon in the same cathedral. But in the middle of his life, he had spent nine momentous years as a singer in the Papal Chapel at Rome—from 1428 to 1437, with an interruption of two years—and there had adapted his Gothic, northern style to the spirit of the Italian Renaissance. It was Italy that taught him to conceal the musical framework, just as she had taught the architects to do without buttresses; it

was Italy that smoothed the angular zigzag lines of his melodies and showed him the charm of limpid, clear-cut forms and of drawn-out, restful triads and sixth chords (AS 35). (A triad in root position has the tonic below, as in C-E-G. A sixth chord is its first inversion, E-G-C.)

AS has recorded two of his French *chansons* (no. 3), a *rondeau* (no. 43), a beautiful motet, *Alma Redemptoris Mater* with Heriman's melody in the treble, and the Kyrie of one of his Masses (the two latter ones on no. 35).

This Mass has the title *Se la face ai pale*, 'If I have a pale face.' Indeed, most Masses of the fifteenth and sixteenth centuries had individual names, taken from some melody, either liturgical or secular, which, performed in long-drawn notes in the tenor part, supported all the sections of the Mass as the backbone. Where such is the case, we speak of *cantus firmus* or tenor Masses.

We have to look back to the motet of the thirteenth century, if not to the older *órganum*, to understand this curious practice. Medieval polyphony had started from liturgical, Gregorian melodies, to which adorning counterpoints were sung. The liturgical melodies, not the contrapuntal voices, had been the essential element. This basic dualism controlled the ways of polyphonic writing all through the Middle Ages, but the accent shifted. The counterpoint would musically get the better of the tenor, it would grow more alive, more flexible, more florid, and yet it needed the solid sub-structure of the sober, immutable Church melody and, in the true spirit of the Middle Ages, needed its unquestioned authority and meaningful presence.

This dualism was no less compulsory in the fifteenth century. The Burgundian masters, though influenced by the Italian Renaissance, were still a part of the longer-lasting northern Middle Ages. But the idea of unquestioned authority had gone. What remained was the meaningful presence and, besides, the delight in the playful interweaving of musical motives pre-existent and newly created, of the well-known and the

novel, of gift and gain, a delight that music has preserved ever since in the variation form.

It was only natural that in this deterioration the sacred *cantus firmi* yielded to the more popular melodies of the *chansons*, and the more so as the fifteenth century loved to mix the spheres of heaven and earth. Composers did not hesitate to build their Masses and motets on worldly melodies, just as the painters replaced the unapproachable Queen of Heaven by the tender Mother of the Child.

However, one form of polyphonic Mass in Dufay's time refrained from any common *cantus firmus* for all the sections. Instead, it availed itself in each of the sections of a corresponding Gregorian melody, of a Kyrie for the Kyrie, of a Credo for the Credo, of a Sanctus for a Sanctus. This form is called a *missa choralis* or plainsong Mass.

In all these polyphonic compositions, the medieval equality in range of the various voice parts (cf. page 98) had begun to yield to an almost modern spacing of voices high and low by nature. One consequence was the conquest of bass regions not considered before. Again it was Dufay whom contemporaries credited with lowering the bass limit from G (Guido's *gamma*) to D below the staff in the bass clef.

Organs, at least in the north, must have followed laws of their own. For we hear, from 1430 on, of organ pipes thirty feet tall, which must have reached far beyond the lowest string of the modern piano.

From Italy we hear of no such thing. Far from joining the north in the development of multiple keyboards, pedals, contrasting solo stops, and thundering counterbasses, Italian organs still consisted of delicate, balanced mixtures of octave, double octave, triple octave, the fifth above, quadruple octave, the fifth above, and quintuple octave, such as

C c c' g' c'' g'' c'''

and sometimes even without disconnecting stops.

Vocal music was astonishingly light-colored. Only about

six percent of all the voice parts in the extant pieces are true bassos, and all men's voices were given a strangely high tessitura.

The majority of compositions in Binchois' and Dufay's time were written for only three voice parts: the melodic *cantus* or *discantus*, the *tenor*, melodic as well, and, between the two, the *contratenor* or simply *contra*, an often entirely unmelodic part which, in order to form harmonic triads with the outer voices, jumped up and down to wherever the filling note was needed and did not hesitate to cross the *tenor* now and again.

Instruments played a vital role in this style, though no composer cared to demand and specify them in his notation. The capering *contra* was anyway not suitable for singing, and the outer voices, or one of them, were often duplicated with, or else wholly or partly played by, instruments. The time liked motley, glittering colors in music just as well as in painting. No literary sources describe the customary combinations, but paintings of the time with musical scenes show that the instruments performing some piece belonged to different, contrasting families in order to keep the voices well apart. A frequent combination was a small or medium-sized harp, a bowed, five-string fiddle, and a portative organ, carried at right angles on a shoulder strap and played with the right hand while the left operated the bellows (cf. plate XVI in the author's *History of Musical Instruments* at page 272).

In dance music, on the contrary, the participating instruments were far more homogeneous, because they did not serve the interests of polyphony proper. Usually, the players performed their *basses danses*, *saltarelli*, and *pive* on two shawms or oboes and on one trumpet, which evidently had a long-throated, telescopic mouthpiece as a trombone-like slide to supply (artificial) melodic notes besides the few skeletal notes provided by overblowing (plate VII, cf. also Appendix).

In keeping with the strong harmonic trends of the time, the Renaissance did frequently (and doubtless also in dance music) renounce the contrapuntal style in favor of a *fauxbour*

don, or, as the English said, a *faburden*. Like the English discant of the twelfth and thirteenth centuries, this technique was a singing, or playing, in parallel thirds and sixths, but it placed the leading melody in the upper voice, so that the middle voice accompanied at the lower fourth, and the basal voice, at the lower sixth. So far, the earliest documents of *fauxbourdon* are Italian and date from about 1430. It seems to have reached England only after 1460.

For the rest, the traditional forms of secular music had not greatly changed. *Ballade, chanson, rondeau, virelai* were, on the whole, what they had been in the thirteenth and fourteenth centuries. French *chansons* of the Dufay generation are recorded in AS 3, and *rondeaux* by Dufay, de Lantins, Binchois, and Grossin in AS 39 and 43.

Even the motet, chiefly used for solemn occasions, both spiritual and secular, clung to the concepts of the thirteenth and fourteenth centuries. Dufay's most celebrated State motet, evidently commissioned by the City of Florence in 1436, has still the old instrumental tenor on a liturgical melody, and two cantus on different, closely related texts, *Salve flos Tuscae* and *Vos nunc Etrusca*, but he did add a *contra* in the style of the time in order to fill the chordal consonances; that is, to complete the triads of which the other two voices provided only two notes instead of three. This was done *below* the tenor, so that this latter was no longer the lowest voice part; the tenor had become what it is today, the higher of the two male voice parts. Dufay's earlier motets, written before the Italian influence, even preserved the Gothic principle of isorhythm in the form in which Machault had used it (cf. page 108).

NOTATION progressed during the earlier part of the fifteenth century both in the field of the mensural script and in that of instrumental tablatures.

The turn from the 'black' to the 'white' notation was a de-

cisive step from the medieval to the modern script. Ligatures were less often used, and the larger symbols—long, breve, semibreve, and minim—which had been black before, were left unfilled, anticipating the unfilled heads of modern whole notes and half notes.

The long had still the value of a modern whole note; the breve, of a half note; the semibreve, of a quarter note.

A hundred years after the apparently first attempt at a keyboard tablature in England (page 110), a similar notation appeared in Germany in 1432. Subsequently, it was there used exclusively till 1624, and had not entirely disappeared even in the time of J. S. Bach, who occasionally availed himself of its facilities.

This so-called German keyboard tablature consisted of the letter-names of the notes—A, B, C, and so on—with, above them, rhythmical symbols taken from certain forms of mensural notation, such as a vertical dash for the semibreve, a dash with one flag for the minim, with two flags for the semiminim, with three flags for the *fusa*. A loop-like flourish at the end of the letter—in medieval writing the customary abbreviation of the Latin ending *-is*—indicated the sharped notes, which in German terminology were, and still are, called *cis*, *dis*, *fis*, *gis*, *aïs*.

One German organ tablature of 1448 is particularly remarkable for having the earliest bar-lines, which became general only in the seventeenth century. Four years later came the most celebrated German organ tablature, Conrad Paumann's *Fundamentum organisandi*, a systematic collection of counterpoint studies (*órgana*) for the organist.

I NSTRUMENTS. The growing importance of keyboard instruments in the North, reflected by the mere existence of tablatures, is confirmed not only by the increasing number of pictorial representations in paintings, woodcuts,

and reliefs, but also by the unparalleled interest in their construction, an impressive evidence of which is the fascinating illustrated treatise of one Henry Arnaut of Zwolle, Netherlands, in the *Bibliothèque Nationale* of Paris, written about 1440 and recently printed in facsimile.

Most clavichords and virginals of the time seem to have had only three semitones in the octave: *B* \flat as the changing note in the *D* and the *F* mode ("una nota super la"—cf. page 57), *F* \sharp as the leading note of the *G* mode on its way to major, and *C* \sharp as the leading note of the *D* mode on its way to minor. Many organs, on the contrary, had already all the five semitones that keyboards have today. A good evidence is the instrument of St. Cecilia on van Eyck's altar at Ghent (cf. plate XVI in the author's *History of Musical Instruments* on page 272).

Whether complete or not, the black keys, almost exclusively used as leading or changing notes, were tuned in some acceptable relation to their immediate neighbors, but not to the other keys. As their usual name *semitonia*, their smaller size, and their rear position implied, they were mere accessories, not keys in the proper sense. Nor were the white keys themselves submitted to any universally valid tuning rule.

Speaking of instruments, it might be worth-while to mention that in 1457 western Europe made its first acquaintance with larger kettledrums, struck by riders on horseback in the retinue of some Polish political mission. They impressed the listeners enough to be eventually received into the western stock of instruments as companions of the princely trumpets. Not everybody liked them, however. The "enormous rumbling barrels"—to use Sebastian Virdung's words in his *Musica getutscht* of 1511—"trouble honest old people, the ill and the sick, the devotees in monasteries who study, read, and pray, and I think and believe the devil has invented and made them."

READING: Gustave Reese, *Music in the Middle Ages*, New York, 1940: Chapter 14. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 15. Curt

Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1430. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. *Instruments de Musique du XVe Siècle. Les Traités d'Henri-Arnaut de Zwolle et de divers Anonymes*, ed. G. Le Cerf et E.-R. Labande, Paris, 1932. Charles van den Borren, *Guillaume Dufay*, Bruxelles, 1926.

LISTENING: AS 3, 27, 35, 39, 43. 2000 Y 4.

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9

THE AGE OF OCKEGHEM

1460-1500

THE TIDAL LAW, manifest in aesthetic reversals from age to age (as the author explains in his *Commonwealth of Art*), interrupted the classical trends of the Renaissance in the 1460's. The arts went back to picturesqueness, haste, and stress on action and feeling. And music went with them.

The Burgundian composers, who had been in the lead before 1460, shared but little in this turn. The new men came from farther north, from the Lowlands, from Flanders and Holland.

The helmsman of the Netherlanders was Jan or Johannes Ockeghem (whose name has also been spelled Okeghem). Born around 1430 in the Flemish town from which he took his name, he served as a choirboy in the cathedral of Antwerp in 1443 and 1444, studied with Guillaume Dufay, probably at Cambrai, and spent most of his life from 1453 on in France as the conductor of the king's chapel. He died in 1495 at Tours on the Loire, mourned as "the prince of Music."

He excelled in Masses and motets, canons and French *chansons*, one of which, *Ma maîtresse*, has been recorded in AS 3. He also wrote the first polyphonic Lamentations of Jeremiah (1474).

Ockeghem's greatest musical contemporary was Obrecht, a Dutchman among Flemings.

Jacob Obrecht (c. 1430-1505) led the typical life of a Netherlandish musician in the age of the Renaissance. Born at Utrecht in Holland, he spent his earlier years in Dutch cathedrals, now as a singer, now as a chapel master, and in 1474 followed an invitation of Duke Ércole (Hercules) of Este to serve in his brilliant chapel of about twenty-five singers in Ferrara. He then returned to Utrecht, where Erasmus, the illustrious humanist, was among his pupils, accepted leading positions in Cambrai, Bruges, and Antwerp, but thirty years after his prior sojourn in Italy could not resist another call, went back to the Este court in Ferrara, and there met his death in the plague of the following year, 1505.

Obrecht's works include many Masses, motets, hymns, and French *chansons*. In keeping with the current practice of the period, AS 27 has rendered one of the latter by instruments without a human voice. AS 80 presents the *Credo* of a Mass for three voice parts. In another Mass, with the cantus firmus *Sub tuum praesidium*, Obrecht revived the archaic style of the Gothic motet: its six voices sang three different texts simultaneously (which, incidentally, was done at the same time by the German composer Adam of Fulda).

But most of his compositions show the triumph of the new harmonic (vertical) over the old contrapuntal (horizontal) conception. This triumph found a particularly strong expression in the cadence or concluding chords, which appear in Obrecht's and Ockeghem's works for the first time in the modern form. The older masters, thinking contrapuntally, had usually prepared the final octave chord (say, $c'-c''$) by a major sixth ($d'-b'$), so that either of the outer voice parts ended in a second-step—the upper voice ascending from b' to c'' , and the lower voice descending from d' to c' . From the end of the fifteenth century on, we find, instead, the orthodox harmonic cadence via the dominant ('authentic') or the subdominant ('plagal'), that is, $b'/g' > c''/c'$ in the first, and $a'/f' > c''/c'$ in the second case.

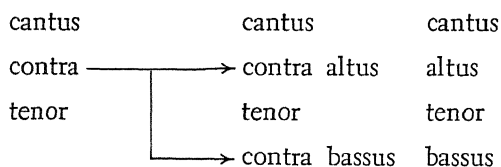
Fond of a powerful harmonic density, Obrecht even gave

his cadences full, triadic final chords instead of the empty fifths and octaves of medieval cadences.

His melodies had an incomparable vigor and breath. The tidy, clear-cut, shortwinded structures of the Burgundians were abandoned, and their smiling, kindly serenity was lost. Ockeghem's and Obrecht's melodies, intense and passionate, stretched in far-flung, powerful arches (cf. AS 3); the voices reached to pitches high and low that had hardly been considered before, and the texture was denser.

The older trio style (*cantus, contratenor, tenor*), sometimes shunned even in the generation of Dufay, was little by little given up as too empty and sober. The modern four-part writing became the rule. Indeed, exceptional pieces went further: Heinrich Finck gave one of his Masses eleven voices; Antoine Brumel, a Fleming in Italian services, wrote a motet for twelve parts; Josquin des Prés, another one for twenty-four parts; and Ockeghem himself, a giant canon for no less than thirty-six voices.

The transition from the standard three-part to the standard four-part writing was momentous from the viewpoints not only of harmony and counterpoint, but also of terminology. For the *contratenor* was cleft into two different parts in order to provide the part to be added. One of them became the *contra altus*, or high contra, more or less stretched between the *cantus* and the *tenor*; the other one became the *contra bassus*, or low contra, which on the main kept below the *tenor*. Graphically:



It was at that time that the word *tenor* began to shift from its original meaning of a 'held,' sustained *cantus firmus* and to adopt the modern sense of a certain range and timbre of

voice. However, as late as 1557 the Imperial chapel in Brussels still called its six men-singers *haulcontres*, *tailles* (tenors), and *bassecontres*, thus keeping the *contra* epithets for both the alto and the basso; and in the following year 1558, Zarlino expressly said that some people called the part above the tenor *contratenor*, some *contralto*, and some *alto*. The French preserved the word *hautecontre* as a translation of *contra altus* for centuries and—with the Italians and Spaniards—call the human alto voice *contralto* to this day. The English, on the other hand, clung long to the even older *contratenor* for the alto voice.

The *cantus firmus* itself was by no means given up. It appeared in the cantus as well as in the tenor. And with a similar unconcernedness as in the generation before, the *cantus firmus* would be taken from secular music, too—indeed, from erotic *chansons*, like *La belle se siet* (The belle sits down) or *Baissez moi* (Kiss me). The song *L'homme, l'homme, l'homme armé* (The soldier) was, for reasons unknown, used more than thirty times as the tenor in French, Netherlandish, German, Spanish, and Italian Masses during the two centuries from Busnois to Carissimi, and even Palestrina is on the list.

Besides such so-called *cantus-firmus* Masses with a foreign tenor, the times offered parody Masses and freely invented Masses. The parody Mass, or *missa parodia*, took not merely the melody, but the whole polyphonic web from some *chanson* or motet, either complete and uninterrupted or only in sections, which had to alternate with freely invented sections. In the third form of the time, the freely invented Mass, the whole material, themes and texture, came from the composer himself. In short:

Tenor Masses, with foreign *cantus firmi*.

Parody Masses, with foreign polyphonic webs.

Free Masses, wholly invented.

Plainsong Masses (mentioned before) drew their melodic material from corresponding Mass sections of the Gregorian liturgy.

The motet itself had turned to the new ideals of the end of the fifteenth century. Not only had it given up the multiple texts, vernacular languages, and secular topics, but also, like the other polyphonic forms, it had done away with the distinction between the individual voice parts, which more and more were given equal weight and importance. Only the *cantus firmus*—as in Josquin's *Stabat Mater* (AS 73)—was for a while retained.

The definition of this new type of motet would be simply: a polyphonic choral composition for four or more voice parts on a Latin text from the Scriptures.

Taking possession of a scriptural chapter untouched before, the motet gave its style to an unprecedented polyphonic *Passion* to supplant the mere Gregorian recitation of the Easter week Lesson on the sufferings and death of Christ.

The earliest examples of polyphonic *Passions*, in Italian and English manuscripts between 1480 and 1490, are anonymous. But around 1500, we find a composer's name connected with such a work: Jacob Obrecht allegedly wrote a *Passion* after the Latin version of St. Matthew, for four voice parts in the customary motet style without distinction of the narration proper, the words of Christ, or the interjections of the people.

GERMANY—for the first time in the Later Ages—was able to present a weighty master of her own: Heinrich Finck. He was born in 1445 and educated in Cracow, Poland's capital. We do not know too much of his adult life—only that, as a mature and prominent master, he served the courts of Poland, Württemberg, and Salzburg. Almost eighty years old, he retired in 1524 to a monastery in Vienna and died there on June 9, 1527.

The none too numerous pieces that a benevolent Providence has preserved show two rather different styles: a number of

predominantly melodic and harmonic, warm-hearted part-songs are connected with the earlier German *Liederbücher* (cf. below); while his polyphonic motets, written on a *cantus firmus*, are close to the up-to-date Flemish style.

A magnificent example of his Flemish polyphony—obviously in his older style that his nephew and editor Hermann Finck describes as ‘hard’—is the Easter chorale *Christ ist erstanden* (Christ has risen), in which four Gothic, angular voices zigzag around the granitic melody of Wipo’s Easter sequence *Victimae paschalis laudes* (2000 Y). Two examples of his tender, melodic part-songs are recorded on AS 51.

To judge from the important collections written down around 1460—the *Lóchamer*, the *Glógauer*, and the *Münchener Liederbuch*—the *Lied* was indeed in the focus of German music.

The two latter *Liederbücher* also contain a number of dance tunes with curious titles, such as *Der Rattenschwanz* or *Der Bauernschwanz*. They are less curious, however, once we realize that the word *Schwanz* had not the modern meaning of ‘tail,’ but derived from an older verb *swansen*, ‘to swing oneself,’ ‘to leap.’ The titles simply mean a rat’s and a peasant’s dance.

The importance of singing, though in other forms, shows also in the peculiar art of the German *Meistersinger*.

THE MEISTERSINGER (‘master singer,’ or, better, ‘craftsman singer’) symbolized the rapid shift of spiritual life from the degenerated chivalry to the working men in cities and towns. The last of the *Minnesinger*, Oswald von Wolkenstein, had died in 1445. Only a few years later, the Swabian Michael Behaim (b. 1416, assassinated 1474) marked the transition from singing knights to singing burghers—though he was not yet a sedentary artisan.

Despite the change of atmosphere, the *Meistersinger* created

no altogether novel style; they were neither pioneers nor revolutionaries. Their merit was to have saved a desiccating art through a transplantation to another soil, which granted it a second bloom for a century and a half. A great personality like the shoemaker Hans Sachs in Nürnberg (1494-1576), hero of Wagner's opera, was able to lift the art of the Meister-singer to a higher level, maybe under the impact of political events and the reformation of Luther. But even the works of Sachs confirm the limited imagination of the masters and show to what degree they patched their melodies up out of well-known turns from folksongs and chorales. Their whole production was squeezed in the iron clamp of 'rules,' any breach being pitilessly recorded with chalk by the *Merker*, or monitor, who, at the weekly singing meetings of the masters in one of the churches, had to safeguard petty correctness rather than power, beauty, or imagination.

"When," says a contemporary chronicler, "the singer has sat down in the singer's chair, and has been silent for a while, the first of the monitors shouts: Begin! Thus the singer begins; and when a stanza has been done, he pauses until the monitor once more calls out: Go on! Having finished, the singer gets up from his chair and cedes it to another one. Monitors are those (usually) four who as chairmen of the guild sit in a curtained booth at a table and a bulky pulpit. The oldest one has the Scriptures in Mr. Luther's translation on the pulpit before him, opens it on the page from which the poem has been taken, and eagerly watches whether the song agrees with the story as well as with the words of Luther. The second monitor, sitting opposite the first, watches out whether the poem conforms to the prescribed laws of the tablature, and wherever offence has been committed, he marks the fine with chalk on the pulpit. The third monitor writes down the rhymes and scores any incorrectness. And the fourth monitor is concerned with the melody, whether it is correct, and also, whether all *Stollen* and *Abgesänge* correspond."

Two similar *Stollen* (the term originally meant a pillar) and

one concluding epode, or *Abgesang*, formed a stanza, or *Bar*, in the form AAB. Thus, even the exclusive principle of *Meistergesang* structure was taken over without any change from the art of the *Minnesinger*. The first *Stollen* was sung *mezzo-forte*, the second, *piano*, and the *Abgesang*, vigorously *forte*.

During the early days of the *Meistersinger*, we hear of the first Italian societies for music performances independent of churches and courts. In 1482 an *accademia* was founded in Bologna, and in 1484 one in Milan. But our knowledge of their exact nature is none too certain.

THE MOVEMENT DOWN towards the bass register, which Dufay had started in a modest way, entered its decisive phase at the end of the fifteenth century. Some scores of the Ockeghem age extended as far down as the voices would carry, one even to C. The movement also showed in novel instruments of a lower range than had been considered before. We hear amazed musicians from Spain in 1493 exclaim that in Italy they had seen some viols as tall as themselves—evidently double-basses. An Italian painter, Matteo di Giovanni, who died in 1495, depicted the first trombone in modern form save for a less expanding bell (and hence a more chamber-musical tone). The painting is in the National Gallery, London (cf. also plate XV).

A short time later, monographs on instruments—which came into fashion soon after 1500—already record full families of wind and bowed instruments, of flutes and shawms, of rebecs and viols, in three or four well graduated sizes each, as treble, alto, tenor, and bass.

The keyboard instruments, too, had to extend much farther down. This extension, however, implied augmented costs, especially for the organ, where any additional key meant the addition not only of one, but of quite a rank of pipes (cf. page 64) with their complicated machinery and, at that, of

the largest and therefore costliest size. Hence the sellers and the buyers were interested in having only the strictly necessary pipes added, with the omission of those *semitonia* which anyhow would not be used in the bass range, as $C\sharp$, $D\sharp$, $F\sharp$, $G\sharp$, since they generally served as leading notes in the melody only.

This resulted in a so-called *short octave* at the lower end of the organ keyboard. The customary arrangement of white and black keys was preserved, and the eye was under the impression that the notes went straight down to E . But the keys operated other notes than those which their position suggested. The usual arrangement was:



in which the E key actually produced C ; the $F\sharp$ key, D ; the $G\sharp$ key, E ; and the other keys, the usual sequence F G A $B\flat$ $B\sharp$.

The stringed keyboard instruments, though not concerned with the high cost of many extra pipes, followed this arrangement since they shared their builders, their players, and their music with the organ. The full chromatic bass octave was not compulsory before the eighteenth century.

The organ itself maintained the contrast between the south and the north. The Italian mixture-organ with one keyboard was still in general use, and only a few builders were willing to add a *flute* as the earliest, though little contrasting, solo stop. The north developed the colorful 'Gothic' organ with its many contrasting solo stops and multiple keyboards suitable for contrapuntal playing styles. As a novel addition, the builders introduced the 'reeds,' or sets of trenchant pipes with metal reeds not unlike those of the clarinet and the saxophone.

The pedal keyboard, invented not so long before (cf. page 111), became important in taking over one of the voice parts and therewith enhancing the contrapuntal possibilities. Indeed, the German organ tablature of 1448, mentioned in

the preceding chapter, displays the practice of a 'double pedal,' in which either foot plays a part of its own instead of coöperating with the other foot in the performance of one single part. (Schlick's *Spiegel* of 1511 mentions even three-part playing on the pedal.)

As another remarkable trait, the organ at Hagenau in Alsace was given, in 1491, the earliest *tremulant* as an interrupting device to produce sentimental slow vibrations when connected with one of the stops. Even so rigid an instrument as the organ accepted the emotional trends of the time.

These changes were the more significant as large collections of organ music, such as the Buxheim Organ Book of about 1470, show the growing importance of organ playing during the later part of the fifteenth century, both in church and in house music.

TEMPERAMENT. It was in keeping with this growing importance that Franchino Gafori's *Practica musicae* of 1496 mentioned the earliest thorough temperament of keyboards by way of shortening the fifths.

Not much later did Arnold Schlick describe this obviously common temperament in his *Spiegel der Orgelmacher* of 1511. Based on medieval beginnings (cf. page 100), the so-called mean-tone temperament had 'divisive' thirds in the ratio 5:4, or 386 cents (cf. page 15), and subdivided them into 'mean' or equal tones. Actually, it was a compromise between the divisive system with its welcome third and the cyclic system with its chain of fifths as a handy way to tune a keyboard.

This compromise works in the following way. The cycle of fifths yields a third by a Didymean comma, or 22 cents larger than the one of the divisive system. Taking a quarter of this comma, or $5\frac{1}{2}$ cents, off each of the four fifths that lead to a third (an amount almost imperceptible to the ear) creates

both satisfactory fifths and octaves, and 'divisive' thirds of 386 cents:

$$C\ 696\frac{1}{2}\ G\ 696\frac{1}{2}\ D\ 696\frac{1}{2}\ A\ 696\frac{1}{2}\ E.$$

The distance from *C* to *E* is 2786 cents. But the *E* is actually two octaves too high; it is two octaves *plus* a third. Thus we have to deduct the cent number of two octaves, 2400, and arrive at the correct 386 cents.

The mean-tone temperament was an excellent solution, melodically and harmonically, when only white keys were used. But it did not work on the black keys: the note between *G* and *A*, for example, would be either *G*♯ or *A*♭. As *G*♯, it would lie two major thirds above the lower *C*, that is, *C*-*E* and *E*-*G*♯, or $386 + 386 = 772$ cents. But as *A*♭, it would lie one major third below the higher *C*, or $1200 - 386 = 814$ cents, which makes a difference of no less than 42 cents, or approximately a quartertone.

Only the radical 'equal' temperament was able to help. It will be described in Chapter 15.

INSTRUMENTAL MUSIC was to a great extent dependent on improvisation.

An impressive example is dance music. The pieces to accompany the leading court dance—*basse danse* or *bassa danza*—consist of nothing but one staff with uniform breves from the beginning to the end under a tenor clef signature. Such skeletal, lifeless rows of notes can evidently not represent the actual music to go with the dance, and so much the less as most contemporary pictures of princely ballrooms show dance bands of three pieces, two shawms or strident oboes and a slide trumpet not unlike a trombone (plate VII). This trumpet, probably the lowest (tenor) instrument of the group, must have played those tenor clef notes. But it could use them only as the raw material for a living melody which the player



























had to adapt to the ever-different step arrangement of the individual dance. The two shawms may have improvised either two higher parallels—in English discant or otherwise—or else two counterpoints *alla mente*, that is, without written-out parts.

Incidentally, whenever paintings of the time show musical performances, singers hold part-sheets, but players do without notation.

TIME AND TEMPO. Notation turned with growing speed away from the medieval traits of uncertain mensuration.

The *longa* was still what the wholenote is today, the breve corresponded to the halfnote, and the semibreve to a quarter-note. Franchino Gafori, apparently the first one, indicated in 1496 that the semibreve corresponded to the pulse of a man with quiet respiration, that is, to MM 60-80.

It might be well to recapitulate, in the following diagram, the approximate time-values of the mensural notes with c. MM 60-80 to the modern quarternote:

| |  |  |  |  |  or  |
|--------------------------|---|---|---|---|--|
| c. 1225: |  |  | | | |
| c. 1250: |  |  |  | | |
| 14th and 15th centuries: |  |  |  |  |  |
| 16th century: |  |  |  |  |  |
| 17th century: |  |  |  |  |  |

In many modern editions, the bewildered reader is faced with curious slow-motion pictures which he cannot be expected to understand. There are two cases.

(1) The editor, realizing that the forms of the ancient mensural symbols live on in modern notation, keeps them in order to preserve the original aspect as much as possible.

In doing so, he ignores the fact that the time-values of these symbols have changed considerably. A breve of the thirteenth century looked like the breve of our time, but was about sixteen times faster; it corresponded, not to a double wholenote of today, but to an eighthnote. In keeping the breve form, the editor has sacrificed musical, audible meaning to meaningless visible form.

(2) Many editors, aware of such grotesqueness, give up the form of the older symbols, yet do not dare to be consistent. They stop somewhere in the middle of the road and reluctantly 'reduce'—as they illogically say—a long to a breve or even a semibreve (wholenote) where the actual meaning is a quarternote. Thus they render neither form nor meaning.

The only acceptable way is to transcribe according to the meaning and to take care of scholarly needs by a simple indication at the beginning of the score: $\square = \text{♩}$

As long as this practice is, alas, not general, the reader cannot avoid transcribing himself what the editor has failed to transcribe for him.

How much the ancients themselves subordinated their symbols to the concept of a compulsory unit of speed—which to us is the normal quarternote as the measure of a natural step—shows in the general practice of the *tactus*.

TACTUS was for centuries the official name for the steady, almost metronomical tempo marked by the even down-and-up of the conductor's hand. The word lives on in the German terms *Takt schlagen*, *taktieren* for 'time-beating.'

Around 1500, the normal *tactus* covered a breve, and either one of its two beats, a semibreve. This means, in modern symbols, a quarternote down and a quarternote up. Since Gafori

allotted the pulse-beat of a man with quiet respiration to the semibreve, a *tactus* must have covered a $2/4$ *allegro* measure in MM 60-80.

To be sure, there was more than just one immutable tempo. But the differences in tempo were very far from the personal arbitrariness of modern performances, where a quarternote can have every possible duration from *adagio molto* to *prestissimo*. Any tempo different from the normal—the *tempo giusto* (as the Handel period called it)—derived from the standard by a strict multiplication of the unit. This was done in the so-called proportions:

Proportio dupla meant double tempo, with two, not one, semibreves to a beat.

Proportio tripla, triple tempo, with three semibreves to the beat.

Proportio quadrupla, fourfold tempo, with four semibreves to the beat.

The diagram illustrates four proportions of tempo, each represented by a sequence of pulse marks (diamonds) and arrows indicating the duration of a semibreve. Below each sequence is a musical notation example with a 'Modern:' label and a 'MM c.:' label with a tempo marking.

| | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <p>Modern: </p> <p>MM c.: 60 60</p> | <p>Modern: </p> <p>MM c.: 60 60</p> | <p>Modern: </p> <p>MM c.: 60 60</p> | <p>Modern: </p> <p>MM c.: 60 60</p> |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|

The tempo signature at the beginning of a piece or section of a piece expressed the *proportio* in an arithmetic fraction: $2/1$ or 2, $3/1$ or 3, $4/1$ or 4, which must not be confused with the modern signature of two, three, or four wholenotes to the measure or, for that matter, with the older signatures of the *modus perfectus* and the *modus imperfectus*. The numerator of the fraction simply indicated how many time-units should take the place of the original one.

The *proportio dupla*—the only one to do so—often did with-

out the numerical symbol and adopted instead a vertical dash through the C-like semicircle that stood for the normal four-beat rhythm. This sign is still in use for a certain change of tempo for which we have stuck to the ancient mensural name: *alla breve*. Its meaning is that the piece has to be taken at twice the normal speed, with one beat to the halfnote, instead of the usual one beat to the quarternote, or *alla semibreve*.

A slightly more complicated case was denoted by the fraction $3/2$ before a piece or a section. Again, this signature did not, as in later music, imply three halfnotes to the bar, but demanded that three notes be compressed into the time ordinarily given to two notes—in other words, that the time be increased by a half. This increase in tempo and reading in triple time was called the *proportio sesquiáltera*, a clumsy term that meant a ratio whose denominator was *áltera*, 2, and the numerator, one more, or 3.

This proportion explains what the Germans called a slightly faster *Nachtanz*, or after-dance, *proporz*. It often used the same melody as the quieter *Vortanz*, or opening dance, but in the proportion $3/2$, that is, in triplets against the former duplets.

A warning to the reader: in the seventeenth century, the German *Nachtanz* is called *tripla* (AS 57) and has accordingly the time signature 3. But it is meant to be the old *sesquiáltera*, whose name has become as obsolete as the whole idea of proportions is meaningless in an age of free tempo.

As for the notes themselves, the once quadrangular heads were often triangular and sometimes even oval, and the stems, which till then had normally been drawn upwards wherever they stood, were, from the space below the middle staff line on, drawn downwards lest they reach into the staff above.

MUSIC PRINTING. Clarity and simplification of the script were the more indicated as music began to benefit from the portentous new invention of printing.

In the first decades of printing, theoretical books and liturgical incunabula left appropriate empty spaces for musical examples to be filled in by hand. And in the sixties some of the printers met the readers halfway by providing red staff lines so that only the notes themselves remained to be added.

The first attempt at actual music printing was made by Ulrich Hahn in Rome in a missal of 1476. His was a rather complicated process of double-printing, first of the staff-lines and then, in a second treatment, of the notes—a process that easily allowed, and often was used, for combining black and red in the two procedures. This technique was so rapidly perfected that, after exactly a quarter of a century, it came to a climax in the famous *Odhécaton* or Hundred of Songs, a beautiful collection of ninety-six favorite pieces of the time, which the publisher Ottaviano dei Petrucci (pron. -ootchee) printed at Venice in 1501.

It was quite definitely a step backwards when, after the first attempts of double-printing, an Italian introduced in 1487 a process of single-printing from wooden blocks into which the page was cut as a whole in the manner of the older woodcut picture books. Since delicacy is denied to woodcutting, the results were notably inferior to those of the double-printing process.

The usual arrangement of polyphonic pieces was still the old choirbook pattern, with all the voice parts written or printed in juxtaposition on two consecutive pages (verso and recto) of the oversized tome on a pulpit in front of the chorus. Scores in a modern sense, with the voice parts exactly below one another, were not yet considered.

The homestead of musical printing and publishing was Venice, with its two patriarchs, Ottavio Scotto, from 1481 on, and Ottaviano dei Petrucci, who obtained a 'privilege of music printing' in 1498.

With printed editions and publishing houses, music entered an entirely new development. No longer dependent upon a

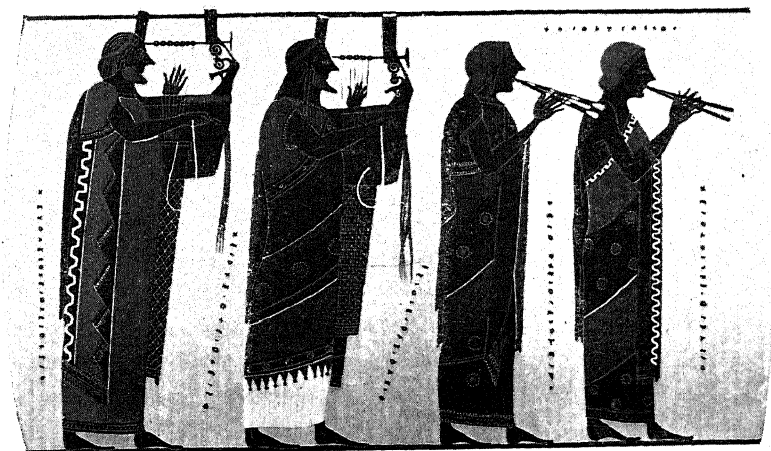
few casual hand-written copies, it was able to overcome the limits of space and time as well as social barriers.

READING: Gustave Reese, *Music in the Renaissance*, in preparation. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 15. Johannes Ockeghem, *Sämtliche Werke*, ed. Dragan Plamenac, Vol. I, Leipzig, 1927: Vol. II, New York, 1946. Jacob Obrecht, *Werken*, ed. Johannes Wolf, 30 volumes in 25, Leipzig-Amsterdam, 1912-1921. Otto J. Gombosi, *Jacob Obrecht, eine stilkritische Studie*, Leipzig, 1925. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1460. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. Otto Kinkeldey, 'Music and Music Printing in Incunabula,' Reprint from the *Papers of the Bibliographical Society of America*, Vol. XXVI, 1932.

LISTENING: As 3, 27, 51, 80. 2000 Y 4, 5.



Greek dancer with clappers, from a vase in Cambridge.



Two kithara players and two pipers in a Greek procession, from a vase in Berlin.

Uerbum patris
Pater bonis

hodie processit ex uirgine uirgines angelice cum canoro
omibz nunciatur angelis refulsit pastoribus ueri solis

Organum and trope in mensural notation, from Higinio Angles, *El Codex Musical de las Huelgas* [thirteenth century], Barcelona, 1931.



Par fens a home prouision au temps que n'est cangeant
 Et a uimagination au temps passe & le present. En que
 lesonges m le pouuoir & l'onneur pour ne l'entier. Par
 crante amour & l'esperance a de l'ynu & de l'ynu. Et en
 subiection maintient ses subies sebalment. Par honne au
 li grant tenement, l'or en l'or a plait on guerre. Par

French ballade in mensural notation of the later fourteenth century, after
 Johannes Wolf, *Schrifttafeln*.

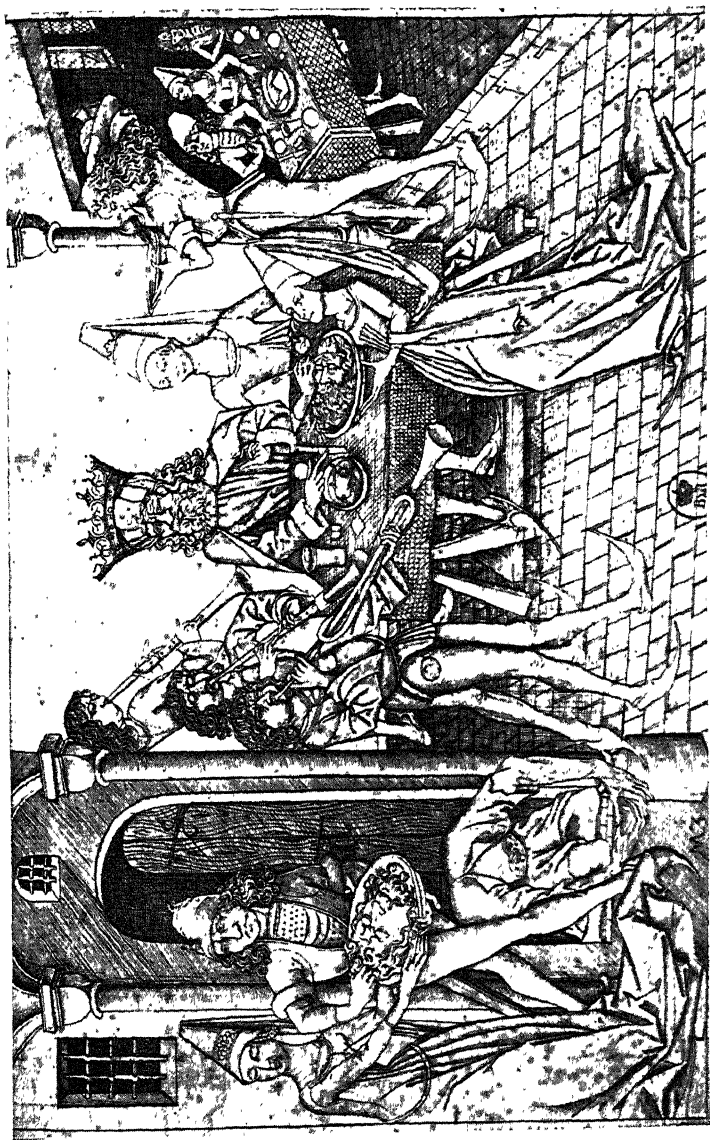
quem meam. **G**loria patri et
 filio et spiritui sancto sicut erat in
 principio et nunc et semper et in
 secula seculorum Amen.

128A. quita Nouèb

Gloria Patri in Gothic plainsong notation of 1487, manuscript in the
 New York Public Library.



The chapel of St. Mark's in Venice around 1496, after a painting by Giovanni Bellini.



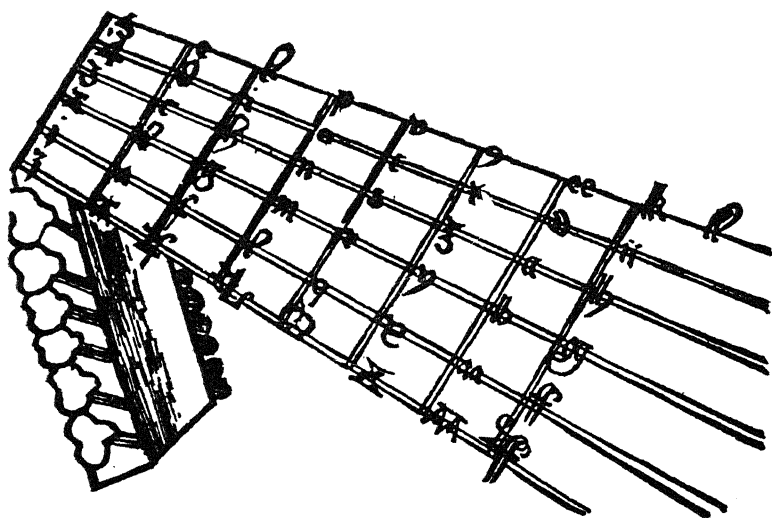
Courtesy dance band in Martin Zasinger's "Decapitation of St. John the Baptist," c. 1500.



Raphael, "St. Cecilia," c. 1515, Museo Civico, Bologna.



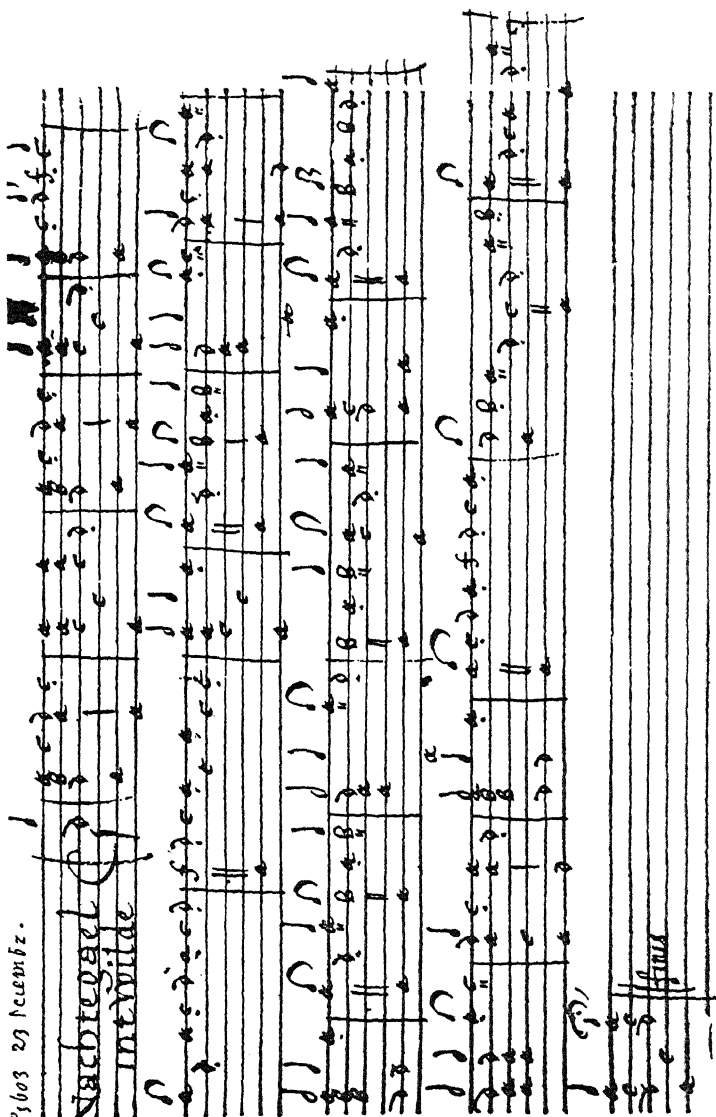
Angel with lute from Vittore Carpaccio's "Madonna" of 1510 in Venice.

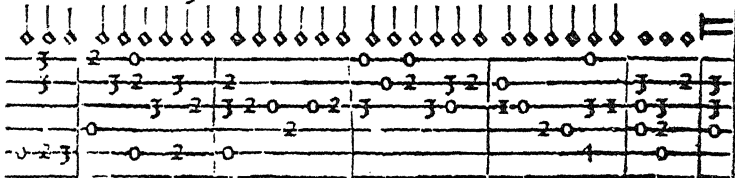
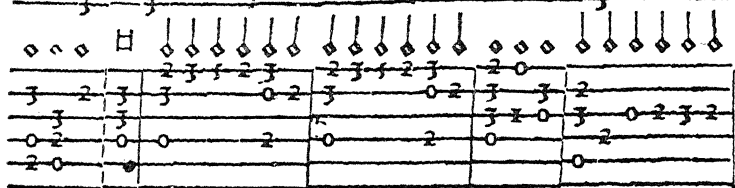
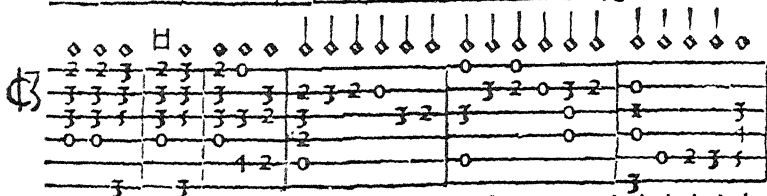
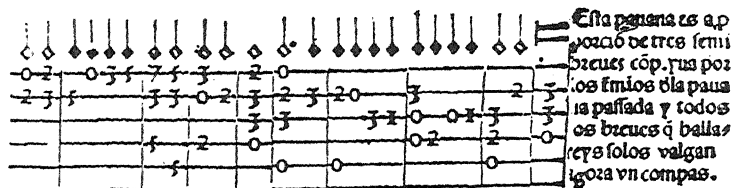


Fingerboard of a lute with the symbols of the German lute tablature,
from Sebastian Virdung, *Musica getutscht*, 1511.

A^o 1603 29 November.

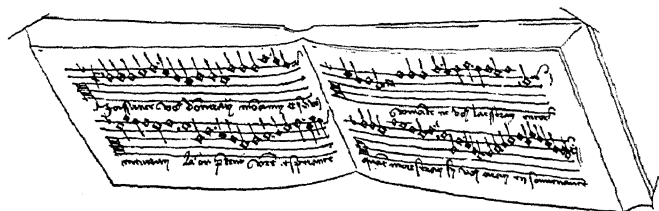
De Nachtegaal
intwilde





Este que agora se sigue es el octauo quaderno de musica para cantar y tañer que en la tabla del presente libro os dire q ballariades. En el que ballareys villancicos y sonadas en castellano y en portugues: y en yraliano. las cifras coloradas es la voz que se ha de cantar pomeys prime roel villanco: así como esta en la vibuela: y sabido bié de tañer: seguireys las cifras coloradas mirando q cuerda dela vibuela tocan y aquella cantareys.

Spanish lute tablature, after Luys Milan, *El Maestro*, Valencia, 1536.



Three ladies performing a chanson, by a French master c. 1530, Harrach Gallery, Vienna.



Lady playing the clavichord, by I. C. Vermeijen, in the Kunsthalle, Hamburg.



Three trumpeters, from H. Aldegrever's series, "The Wedding Dancers," 1538.



Francesco Ferdinando Richter's portrait of Francesco Maria Veracini
(1685-1750).

10

THE AGE OF JOSQUIN

1500-1530

THE HIGH RENAISSANCE also had two phases: one roughly from 1500 to 1530, and one from 1530 to 1565. And, once more as in the early Renaissance, the first phase was quiet and reserved, and the second, agitated, dramatic, and free. In the first, the object of this chapter, music went Raphael's way—the way of strictness and clarity in structure, of dignified sedateness, of moderate emotion. The boundless confusion of Ockeghem's days was gone. All music submitted to the laws of simplicity and discipline.

The leading masters were Josquin des Prés and Henry Isaac.

JOSQUIN DES PRÉS was the greatest representative of the time. His first name is the French spelling of the Flemish pet name Joskin, equivalent of our Joe, and his last name—so often nonsensically misspelled with an accent grave—means 'meadows' or 'pastures,' like the last name of his older countryman, the painter Roger van der Weyden. Josquin himself, though, used the archaic spelling *Prez*.

The master must have been born in Hainaut, Belgium, around 1450. He became Jean Ockeghem's pupil in Paris, spent at least thirty years—with an interrupting stay at Cambrai from 1495 to 1499—in Italian chapels in Milan and Rome, in Módena and Ferrara, lived once more in Paris, and died as

the provost of the cathedral at Condé in his native country on August 27, 1521, a few months after Raphael.

His works include *chansons* in French, but mainly psalms, motets, and Masses, of which the ones surnamed *Ave maris stella*, *Pangue lingua*, and *Hercules* (AS 73) are best known.

The latter work is very strange in its melodic conception: the leading theme is not due to any creative imagination or inspiration and not even to the technical consideration of contrapuntal piancy. It is a *soggetto cavato* (pron. *sodjetto*), or 'extracted subject,' provided by the simple and apparently mechanical process of substituting for each syllable in the name of Josquin's employer Duke Ércole of Ferrara, the note (or one of the two notes) whose solmisation syllable has the identical vowel:

| | | | | | | | |
|------|-----|-----|-----|------|-----|-----|----|
| Her- | cu- | les | dux | Fer- | ra- | ri- | e |
| re | ut | re | ut | re | fa | mi | re |
| D | C | D | C | D | F | E | D |

Josquin followed exactly the same principle in his curious polyphonic fanfare *Vive le roy*, Long Live the King (AS 108), whose *cantus firmus* transforms the vowels u(=v) i u e e o i into the notes *ut mi ut re re sol mi* or *C E C D D G E*.

The mystic spirit of the Gothic Middle Ages had not yet disappeared. Hidden, esoteric significance still weighed more than superficial, sensuous beauty—even if such a pregnant cohesion in the spirit is almost paradoxically found by way of a merely sensuous, superficial likeness.

We do not know, and perhaps will never know, how far this Gothic procedure had deteriorated in Josquin's mind to an amusing trick. Anyway, the master had otherwise conquered the spirit of the Middle Ages. Celebrated as 'the prince of music' by contemporaries and as a beloved patriarch by at least two following generations, he was, in the years of his maturity, the chief representative of the high Renaissance, side by side with Bramante, Leonardo, and Raphael. As such, he dammed the ecstatic torrent of Ockeghem's style and shaped

his quiet melodies out of the natural flow of the words. As once Dufay had done, he delighted in chains of restful perfect chords (2000 Y) and molded his ideas in strict, transparent, symmetrical forms. To emphasize this symmetry, he would often repeat a phrase of the two higher voices in the two lower ones and thus anticipate, in a way, the antiphony of two choruses so dear to the Baroque.

Indeed, while the Burgundians and early Flemings had, under the sway of medieval ideas, allotted different tasks to each of the voice parts—to serve as a *cantus firmus*, or as a free counterpoint, or as a harmonic filler—the Netherlanders increasingly assimilated them in the spirit of balance that ruled the Renaissance, until they all were partners with equal rights and duties. Late in the fifteenth century, the process of assimilation went so far that the voice parts would present themselves, in the manner of a fugue, in successive entries with the same initial motive in each of the sections of a piece, although they were free to continue in their own ways.

Hugo Riemann ascribed this novel form of weaving the voice parts in a fugato technique to Ockeghem. The present generation of historians is rather inclined to give the honor to Josquin. The term that Riemann coined, *Durchimitierender Stil*, or, literally, 'through-imitation,' has no proper equivalent in English.

This imitative style is in itself only a part of a greater innovation—indeed, of the most essential innovation—in the concept of polyphony which is the real divide between the Middle and the Later Ages in music. While the medieval contrapuntists had composed the voice parts one after another—the tenor first, then the *cantus*, and lastly the *contra*, without the conception of a coherent, perceptible whole—the generation around 1500 began to conceive polyphonic pieces in the modern sense, as units in which the voice parts were meaningless elements without a life of their own. The earliest evidences appear in the writings of Pietro Aron, in *De Institutione Harmonica*, 1516, and *Thoscanello de la Musica*, 1523. After de-

scribing the outmoded method of successive writing, he says that from Josquin, Obrecht, Isaac, and Agricola on, composers considered all the voice parts *together*. But, he adds, "doing so is a very difficult thing and requires long training and practice."

In keeping with this new ideal of balance, but also in keeping with the much more austere attitude at the turn of the century, were the renouncement, at least in principle, of the older gay and motley mixture of voices and instruments within the same composition and the adoption, in its place, of the urge for an *a cappella* polyphony of unadulterated human voices. To a certain extent, the time was feeling what St. Clement of Alexandria had felt some thirteen hundred years before: "We need one instrument, the peaceful word of adoration, not harps or drums or pipes or trumpets."

Raphael, the leading painter of the time, has left an unforgettable pictorial symbol of this reversal in his St. Cecilia in the museum of Bologna (plate VIII). Flutes, a triangle, cymbals, drums are scattered on the ground in utter neglect, the viol has cracks and the skin of the kettledrum is burst, the very portative organ is dropping from her holy hands and losing its pipes. But she pays no attention. Rapt, she listens to the purer sounds from above, from the clouds where, freed from the earthliness of instruments, four angels bend over the choir-book and sing *a cappella*.

HENDRIK, OR HENRY, ISAAC was the master closest to Josquin. Born in Flanders some time before 1450, he went to Italy and there served now the Duke of Ferrara, now Lorenzo the Magnificent of Médici in Florence, then again lived in Innsbruck at the court of Emperor Maximilian I, returned to Florence and once more to Germany to work at Augsburg and Vienna, and died at Florence in 1517.

This life, beginning in the Netherlands and subsequently

alternating between South Germany and Italy, is reflected in his works much less as a mixture than as a co-existence of styles: he expressed himself in Flemish music like a Fleming, in Italian music like an Italian, in German music like a German, and he even composed French *chansons*. Besides his songs in Latin, French, Italian, and German, he wrote many Masses and motets and also instrumental pieces. The most popular of all his compositions is the German Lied *Innsbruck ich muss dich lassen* (Innsbruck, I must now leave thee), which he probably wrote when his time in the capital of the Tyrol was up. The heartfelt melody of this secular song found a warm welcome in the Lutheran liturgy as a chorale with the title *Nun ruhen alle Wälder* (In peace now rest all forests), which later became an Anglican hymn with the text *O Lord how happy should we be*, and also an Episcopal hymn on the words *Come see the place where Jesus lay*. Another of his German songs, *Zwischen Berg und tiefem Tal* (Twixt the mountain and the vale, The road lies wide and open), is recorded in AS 3, and an instrumental piece, in AS 43.

Another fascinating pupil of Ockeghem, still little known, was Loyset Compère, a Franco-Fleming (d. 1518), to whom the *Odhécaton* gave no less than twenty-two of its ninety-six numbers. A vigorous *Crucifige* motet has been recorded on AS 80.

THE LEADING ITALIAN FORM was the *fróttola*: a lyrical song with, generally, the melody in the upper voice and an accompaniment of two or three lower parts which followed in chords rather than in counterpoints and were either played on one or several instruments or else sung. To be sure, the singers were soloists—choral rendition was not considered.

Its structure, like that of the *ballata* (page 106), consisted of a number of stanzas preceded, separated, and followed by *riprese*, or refrains. Each stanza had a melody in two sections,

which may be called A and B. The *ripresa* availed itself of the whole melody, AB. In the stanza, two lines followed A; the next two lines, A as well; and the last two lines, B. Graphically:

| | | | |
|----------|-----|-----|----|
| ripresa: | AB | AB | AB |
| stanzas: | AAB | AAB | |

The last *ripresa* would end in an additional coda taken from the first half of A.

The Venetian publisher Ottaviano Petrucci published no less than nine collections of *fróttole* in the four years between 1504 and 1508 and an eleventh one in 1514; the tenth book is lost. They were, indeed, in great demand, particularly in the courtly circles of Mantua and other north Italian city-states; and leading masters, such as Marco Cara and Bartolommeo Tromboncino among the Italians, and Henry Isaac and Josquin des Prés among the Flemings, placed their art at the disposal of the fashionable form.

This is important: it shows that regular structure, simplicity, and catchiness were at that time the usual traits not only of folk and popular music, but also of the refined music of the elite. They were characteristic of the classical-minded first generation of the sixteenth century.

Phonographic recordings of *fróttole* can be found on AS 77, side A. On side B of the same disc, two favorite composers of *fróttole*, Marco Cara and Bartolommeo Tromboncino, appear with another favorite form of the time, the *lauda* (plur. *laude*), which, except for its devotional text, was related and indebted to the *fróttola* in its simple upper-voice melody and four-part setting. It should not be confused with either the late medieval form of this name (cf. page 107) or the popular *lauda* in Filippo Neri's prayer chapel after 1550.

A third preponderantly vocal form was the classical ode, for whose revival the humanistic, Latin trends of the century were responsible. Sometimes, as in Petrucci's three books of *fróttole* of 1504, the name implied strict, iambic songs with a curi-

ous rhyme arrangement (AAAB BBBC CCCD DDDE / and so on). In the main, however, the name denoted a Latin ode by Horace, or some other poet of a similar cast, set to music in 'quantitative' meter. The term, discussed before, means that every short syllable was rendered by a short note, and any long syllable, by a note of double value, while the accompanying voice parts followed note against note in *stile familiare*, as it was called. First suggested by the German humanist Conrad Celtes (1459-1508) shortly before 1500, such beatless pieces were then written during two generations. Among composers in quantitative meter, we find the Germans Tritonius (1507), Paul Hofhaimer, famous organist to the Imperial court (1539), and the greatest Swiss musician, Ludwig Senfl (1532). France joined them a few decades later with her *vers mesurés* (cf. page 188).

A final pseudo-plebeian, popular form of the time was the *strambotto*. It had stanzas of eight lines, of five iambs each, with the curious rhyme arrangement AB AB AB CC, that is, two alternating rhymes for the first six lines and a fresh rhyme for the last two. The Italians called this arrangement *ottave rime*. The melody, in the upper voice, spanned only two lines in its two sections, A and B, and had to be sung four times. Graphically:

| line | rhyme | melodic phrase |
|------|-----------|----------------|
| 1 | -ardenti | A |
| 2 | -serra | B |
| 3 | -accenti | A |
| 4 | -guerra | B |
| 5 | -tormenti | A |
| 6 | -terra | B |
| 7 | -core | A |
| 8 | -honore | B |

THE PROTESTANT CHORALE was the logical issue of a Church reform that gave the congregation as a whole an active part in the service. As a congregational song, the chorale was bound to be simple and great, strong and impersonal.

As a German song, the chorale also needed a regular alternation of stressed and unstressed units, both in its words and in its melody, generally with three or four stresses in an iambic meter, as *Christ lág in Tódesbánden*.

In such regular alternation, the chorale was related to the German folksong, and the circle of musicians around Luther did not hesitate to avail itself of this treasure house. The melody was retained, and only the secular words were replaced by religious poetry in a process that the ancients called a *contrafact* or *parody*.

But the regular iambic or trochaic alternation of stressed and unstressed units, so dear to German songs, was also the metric principle of the Catholic 'hymn.' And so it happened that quite a number of them were kept in the Lutheran Church. *Veni redemptor gentium* became *Nun komm der Heiden Heiland*, and *Veni creator spiritus* was given the new text *Komm Gott Schöpfer heiliger Geist*.

But the old, inherited stock was not sufficient, either in number or in spirit. The blooming of a new religious poetry entailed a blooming of composition. To be true, not all the melodies that we find in the early chorale books were divine inspirations; many were vamped up with melodic turns found here and there in folksongs and melodies of the Church.

Luther's own activity in composing or piecing together is doubtful; even the war song of the Evangelical Church, *Ein feste Burg ist unser Gott* (A mighty fortress is our Lord, or, originally, *Oure God is a defence and towre*), cannot be traced to him with any probability.

As early as seven years after the posting of the theses, in 1524, no less than four chorale-books with unaccompanied melodies were published in Wittenberg, Erfurt, and Strassburg. But the time, and Luther himself (who was a great admirer of Josquin des Prés), clung so much to the intricate weaving of Netherlandish polyphony that the chorale, with all its essential simplicity, could not elude elaborate setting in the imitative *cantus firmus* style. Thus, the reformer's musical adviser, Johann Walter in Wittenberg, edited, once more in 1524, a *Geystliches gesangk Buchleyen* with thirty-eight chorales for three, four, five, and even six polyphonic voice parts, the melody being in the tenor. As the climax of this early Lutheran polyphony, the printer Georg Rhaw, also in Wittenberg, published in 1544 *Neuwe Deudsche geistliche Gesenge*, or New German Spiritual Songs, with contributions of the leading masters, such as the Swiss Ludwig Senfl, the Silesian Thomas Stoltzer, and the probably Swiss Arnold von Bruck (2000 Y 5).

The difficulties of these sophisticated settings excluded the congregation as the performer; only well-trained choirs would do. This need led to the establishment of two important forms of organization, the *Kantoreien* and the *Gymnasialchöre*.

The *Kantoreien*, or spiritual glee clubs, had their roots in pre-Reformation laymen's fraternities, many of which turned to the new faith. After Johann Walter had founded the first informal Protestant *Kantorei* in Torgau on the Elbe in 1529, the *Kantoreien* spread rapidly all over the country, singing for their own edification and helping in the church on Saturdays and Sundays.

In addition, music had a favorite place in the *Gymnasium* (the German secondary educational institution, somewhat between highschool and college, with Latin as its backbone). It was often granted six periods a week, and the *cantor*, or singing teacher, stood next to the *rector*, or principal, in the faculty. But the other teachers were also expected to be musical: "A schoolmaster must sing; otherwise I would not look at him," said Luther. The singing classes prepared the repertoire of the

services in the parish church—and not only the current liturgy. Rather, they were bound to have ready every Sunday, and often every Saturday afternoon, a couple of modern religious settings, a motet or, later, a cantata, whether written by the cantor himself—as we know so well from the life of Bach—or taken from the stock of older masters. The school regulations recommended expressly Josquin's works and, later, those of Orlandus Lassus.

Musical life in Germany owed its blossoming to the burghers. The active coöperation of princes and noblemen, so prevalent in other countries, was in general lacking. Shortly before King Henry VIII of England married Anne of Cleves in 1540, his emissary Nicholas Wotton reported to him: "Frenche, Latyn or other langaige, she hath none, nor yet she canne not syng nor playe enye instrument, for they take it heere in Germanye for a rebuke and an occasion of lightnesse that great ladyes shuld be lernyd or have enye knowledge of musike."

INSTRUMENTAL FORMS, as distinct from those of vocal music, were created at an increasingly rapid pace.

The *ricercar* (pron. reetcherkáhr) or *ricercare* (pl. -i) was a name rather than a definite form. The oldest known *ricercari* were pieces for the lute that Petrucci printed in 1507. They consisted of alternating groups of chords and passages, and closely resembled what at that time were called preludes and, later, toccatas. Of a similar kind were the older *ricercari* for organ (the first in 1523) and for viol (probably first appearing in Ganassi's *Regola Rubertina* of 1542).

Since the name belonged for several decades to non-imitative, non-polyphonic forms, it cannot, as often assumed, describe the re-seeking (*ri-cercare*) of the theme in each of the voice parts. It rather denoted—as it does in modern Italian—

preluding, or striking the keys, which is also the meaning of the closely related *toccata*, or 'touch' piece.

Not earlier than 1542 did the name denote polyphonic, imitative pieces for soloists or instrumental ensembles, which eventually led to the fugue (AS 4, by Giovanni Gabrieli). The pieces differed from the fugue, however, in that they were not integrated wholes that progressed to final climaxes, but were usually set in separate sections, each with a different theme, which was successively imitated in each of the voice parts and then abandoned. Thus, these *ricercari* were at bottom instrumental versions of the ordinary vocal motet.

They had counterparts in the Spanish *tientos* (AS 69, by Juan Cabanilles) and the Portuguese *tentos*. Any *ricercar* less strict and less 'learned' than usual was called *fantasia* and, later in England, *fancy*.

Besides the various forms of *ricercari*, instrumental music gave an important place to dance melodies.

In keeping with the dignified restraint of the generation of 1500, the pavan had a leading position. Ceremonious and even processional, it was one of the simplest and quietest dances ever performed: open couples did a regularly recurring step pattern of two $4/4$ measures in about $\text{♩} = \text{MM } 60$, with mincing, well-measured steps, now drawing up to the other foot now gliding past it.

The earliest pavans appeared in tablatures for lute that the printer Petrucci in Venice published in 1508, but the pavan seems to have disappeared from courtly ballrooms as early as the middle of the century. However, it survived as a purely instrumental form of the pattern AA BB CC, that is, as a series of different 'periods,' each of which consisted in a repeated phrase of four measures. Outstanding examples are the beautiful pavans by the Spaniard Luis Milán for *vihuela* (the larger guitar of Spain), printed in 1536 and recorded on AS 40 (plate XII; cf. also AS 6).

Incidentally, Milán's publication *El Maestro*, with the two marks a *priesa*, or 'rapidly,' and a *espazio*, or 'slowly,' was the

earliest work to prescribe a change of tempo within the same piece. The practice was unusual in the sixteenth century and, even with Milán, was used in instrumental music only.

Dances livelier than the formal pavan existed, to be sure, but they played an accessory role. The *galliard* did not appear before 1529 in prints, and the playful, circle-dances—*branles* in French and *brawls* in English—were so much below the dignity of the age that wellbred people did not do them in public unless they were masked.

The commonest player of dance music was the lutanist.

THE LUTE, rich in resources and easily carried, played an ever increasing role in a time that strove for vertical rather than horizontal expression.

In its typical, elegant, almond shape, with a shell of slender staves, it had been brought from Persia at the end of the first millennium A.D., had originally been confined to the Arabian and Moorish parts of the Spanish peninsula, and then had slowly spread over the continent. During the Middle Ages, the Europeans had played it in the oriental fashion with a quill plectron; and they had performed on it one voice part only, either within a polyphonic piece or else in a free unison with a singer's voice.

Lute music with the use of multiple stops emerged only about 1500, after the example of keyboard styles. Its artistic value was still undeveloped. Besides *impromptus*, it consisted mainly of arrangements of polyphonic and chordal pieces in which all voices or notes that could not be easily fingered were skipped.

As an additional difficulty, the lute had no consistent tuning and changed its pitch according to the range of the accompanied singer, to its own size, and to the strength of its strings. As late as 1603, *The Schoole of Musicke* by Thomas

Robinson gave the disconcerting prescription: "First set up the Treble, so high as you dare venter for breaking."

This made it hard to play from ordinary notation. The same notes required a different fingering on every lute and for each singer. Moreover, it was quite impossible to play from the separate part-books in which polyphonic music of the time was written or printed.

As a way out, the lutanists invented a tablature which allowed the player to neglect the absolute pitch and to prepare the pieces in an acceptable score form. Like any tablature before and after, the lute tablature indicated, not what the listener was to hear, but what the fingers were to stop on the fingerboard. Its staff lines stood for strings, and its figures or letters for frets or stopping places.

In the *German tablature* (plate X), six (originally five) lines represented the (single or double) strings, or 'courses,' as they appear when the lute lies before the player with the pegbox to his left and the bridge to his right. As a consequence, the lowest string was represented by the lowest line. Figures on the lines stood for the open, unstopped strings: 1 for the lowest (of the original five) and 5 for the highest string. Other signs indicated the various stops; first the letters of the alphabet, then, after z, a few special symbols, and again the letters, with apostrophes, for the highest frets. Thus, a was the first stop on the (originally) lowest string; b, the first stop on the neighboring string; c, on the middle string; e, on the highest string; again, f meant the second stop on the lowest string; g, the stop next to b, while k stood for the second stop on the highest string; and so forth, proceeding stop by stop across the fingerboard, from the lowest to the highest string. As a result, the symbols on the lowest string meant: 1, the open string, however tuned; a, the semitone above; f, the wholetone; l, the minor third; q, the major third; x, the fourth; a', the augmented fourth. Subsequently, the sixth (lowest) double string was indicated by a cross, and its frets, by capital letters.

The time-values were indicated above the staff by the head-

less stems of the corresponding mensural signs: the wholenote by a dot (since the corresponding semibreve had no stem), the halfnote by a bare stem, the quarternote by a stem with one flag, the eighthnote by a stem with two flags, the sixteenth by a stem with three flags (so that there was always one flag more than the modern notes have). When a letter of the tablature had no time symbol of its own, it repeated the last preceding value.

The earliest German tablature dates only from 1511 (not 1512, as has been said), to be sure. But the notation itself must be much older; the five strings for which it was devised testify to a stage of development that the lute had outgrown long ago.

The later tablatures—of the French, Italian, and Spanish lutanists—kept the lines as images of the strings, but differed in marking the stops.

The French tablature, first printed in 1529, had no figures for the open strings and recommenced the alphabet on each line, so that, on whatever line the letter stood, *a* denoted the open string, *b* the first (semitone) fret, *c* the second (whole-tone) fret, *d* the third (minor third) fret, *e* the fourth (major third) fret, *f* the (fourth) fret, and so on. This method was, from every viewpoint, so much simpler and easier that the French tablature triumphed over the German tablature even in Germany (plate XI). After 1584, however, the French, in their turn, began to change to the Italian tablature.

The Italian tablature—already printed in 1507, four years before the earliest available date of the German tablature—reversed the staff because, when played, the instrument turned its lowest string up. The stops were marked in a way similar to that of the French, but the letters were replaced by figures: 1 for the open string, 2 for the semitone fret, 3 for the whole tone, 4 for the minor third, 5 for the major third, and so on.

The Spaniards used the Italian tablature, but with the highest string up (plate XII).

Briefly, the four tablatures consisted of:

LETTERS

| | |
|---------------------------------------|--------|
| running across from string to string: | German |
| running along each string: | French |

FIGURES

| | |
|-------------------------------|---------|
| the lowest string uppermost: | Italian |
| the highest string uppermost: | Spanish |

THE ORGAN continued developing at a tremendous pace. In 1511, a German organist, Arnold Schlick, gave it the earliest monograph, *Spiegel der Orgelmacher und Organisten* (Mirror of the organ builders and players), in which the fetters of medieval tradition are cut for good. He not only described an impressive number of solo stops, but even recommended—as something entirely unheard of—freely combining two or more solo stops in order to create tone colors unwonted and fascinating.

Such progress was made, however, in the north of the continent, not in the south. Italy, Spain, and southern France, and England also, lagged behind; they stuck to manuals, flue pipes, and mixtures, and used solo stops and pedals only as exceptions.

The sequence of nations was inverted when it came to creating a modern script for the organ and other keyboard instruments. As early as 1523, the Italians printed the first keyboard scores in modern form, with a right and a left hand staff of five lines each and with bar-lines. The French soon imitated them, but England again lagged behind, and Germany did not follow until a hundred years later (1624), and it did not abandon the older forms of notation for a hundred years more.

THE BOWED INSTRUMENTS bequeathed by the Middle Ages were in a state of chaos around 1500. But around 1510 they began to settle into the two essential families that the Later Ages used: the *viola da braccio* and the *viola da gamba*.

The family of the *viola da braccio*, or 'arm viols'—equivalents of our violins, violas, and 'celli—were given the modern forms except for the highest string, which was added in the second half of the century. As early as about 1535, a fresco in the dome of the cathedral at Saronno in northern Italy rendered a complete trio of an actual violin, a viola, and a tenor violin (probably an octave below the violin), though with only three strings each.

Silvestro Ganassi's *Letztione Seconda . . . di sonare il Violone* of 1543 already mentions *vibrato* and *pizzicato*. The latter had probably been an old Italian practice dear to the land of mandolins and guitars; and the *vibrato* seems to have been introduced by Polish fiddlers,

"Who, while their stopping fingers teeter,
Produce a melody much sweeter
Than 'tis on other fiddles done."

Martin Agricola, *Musica instrumentalis*
Deutsch, ed. 1545, f. 42.—Transl. C. S.

The *viola da gamba* (sing. -a), in modern English now called gambas, now viols (not violas!), were similar to the family of the violin or *viola da braccio* except for certain important traits.

(1) The body was deeper, met the neck in sloping shoulders, and had a flat back.

(2) The fingerboard was 'fretted,' that is, provided with loops of catgut to mark off the notes of the scale.

(3) Of the three chief members of the family, the treble

had roughly the range of the viola, the tenor, the range of the now abandoned tenor violin (an octave below the ordinary violin), and the bass, the range of the 'cello. In addition, there were doublebasses.

(4) The six or seven strings were thinner and had a lute-like tuning in fourths with a major third somewhere in the middle:

| | |
|--------|-------------------------|
| Treble | <i>d g c' e' a' d''</i> |
| Tenor | <i>A d g b e' a'</i> |
| Bass | <i>D G c e a d'</i> |

(5) The bass was held between the legs, like a 'cello, and the smaller sizes, vertically upon the legs (not horizontally against the shoulder). Hence the name *da gamba*, belonging to the leg.

(6) The bow was held palm up, pushed forward on accented beats, and drawn back on non-accented beats.

(7) The tone was more delicate, silvery, and reserved.

THE AGE OF INSTRUMENTS found its clearest expression in the printing of quite a number of fingering exercises, methods, and manuals for various instruments.

A few Germans made a beginning. In 1511, Arnold Schlick published the manual on organ building and playing just mentioned. In the same year, Sebastian Virdung, a Bavarian priest and Schlick's fellow-member in the court chapel of Heidelberg, printed a general treatise on the instruments of his time under the title *Mvsica getutscht*, or Music in German (cf. plate X), in the form, customary at that time, of a dialogue between some eager disciple and the master, and with numerous woodcuts. The two works were reprinted by Robert Eitner (cf. Bibliography).

Not much later, about 1516, the lutanist Hans Judenkunig published in Vienna an *Utilis et compendiosa introductio*, or

Useful and Comprehensive Introduction for Lutes and Viols. The book had a respectable Latin title, to be sure, but in the subtitle, the author was obliged to call his subject *Lutinae et quod vulgo Geygen nominant*, Lutes and what they commonly call Geigen, which was a nice reminder that scholarly Latin did not too well agree with instrumental manuals. Indeed, about seven years later, in 1523, Judenkunig printed a German edition as *Ain schone kunstliche underweisung*, or Nice and Artful Instruction.

However, Virdung's book had had the advantage of being all-comprehensive and richly illustrated. Small wonder that a younger man, Martin Agricola (1486-1556), a cantor at Magdeburg in Saxony, availed himself of Virdung's woodcuts and general idea and wrote, in doggerel verses and a popular language, a *Musica instrumentalis deudsch*, or Instrumental Music in German (several editions from 1529 to 1545), "which comprises a method of learning how to play on various wind instruments, based on the art of singing, and how to play on organs, harps, lutes, viols, and all instruments and strings according to the correct tablature."

With regret, the reader leaves these honest, simple books on playing and instruments, to turn to the depressing treatises on general matters of music, which reflect the pitiless war in vilest form among the musicological chairs of North Italian universities, and particularly between the progressive party of the Spanish-born Bartolommeo Ramis de Pareja in Bologna and the conservative party of Franchino Gafori in Milan. While Gafori stuck to the Guidonian tradition of the Middle Ages, Ramis, two hundred years ahead of his time, postulated the abolition of Guido's obsolete hexachords and the recognition of a through octave, in which the teachers and the pupils could move without the pitfalls of mutation.

The greatest merit of both men was to draw the attention of contemporary musicians to the equal temperament with five perfectly even semitones per tetrachord that Aristoxenos had

recommended. In so doing, they paved the way for the modern equal temperament.

MUSIC PRINTING was at first done in either one of the two procedures described in the last chapter: double-printing, as in Petrucci's *Odhecaton*, and the clumsier single-printing from woodcut blocks. The Italians, however, replaced the wooden blocks as early as 1516 by hand-engraved metal plates, used to this day. The English followed only a hundred years later with Orlando Gibbons' *Fantazies of three parts for viols*, of about 1609.

As an entirely novel process, music was printed with movable types for one note each, placed at the proper point of the staff, which in its turn was closely cut off left and right of the note, so that it met the neighboring sections as accurately as possible. To be sure, the junction could never be good enough to present an uninterrupted staff; the reader always faced a flickering mosaic. Besides, the movable types presented serious difficulties in keyboard music with its chords and polyphony. They were acceptable, however, where there was only one note at a time, in the old choirbook arrangement of polyphonic works with all the voice parts on two open pages, as well as in the new arrangement, which Petrucci first printed in motets of 1504, with all the voices in separate part books, one for the *cantus*, one for the *altus*, and so on.

The leading printer and publisher in this kind of type was Pierre Attaignant in Paris, *rue de la Harpe*, who issued, from 1527 to 1549, an impressive number of collections of French *chansons*, *motets*, *Masses*, *pavanes*, *gaillardes*, and other music.

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italienische Laude um 1500, Leipzig, 1935. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter -. Curt Sachs, *The History of Musical Instruments*, New York, 1947: Chapter 15. Gerald R. Hayes, *Musical Instruments and their Music 1500-1750*, Vol. II, *The Viols, and other Bowed Instruments*, London, 1930. Walter H. Rubsamen, *Literary Sources of Secular Music in Italy (c. 1500)*, Berkeley, 1943. Willi Apel, *The Notation of Polyphonic Music 900-1600*, Cambridge, Mass., 1942, 3rd ed., 1945. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1500.

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LISTENING: AS 27, 43, 73, 77, 80, 107, 108. 2000 Y 4, 5

11

THE AGE OF GOMBERT AND WILLAERT

1530-1564

THE STRICTNESS, RESTRAINT, and serenity of the Josquin-Raphael time had almost gone by 1530. The new generation—Michelangelo's age—strove once more for passion, exuberance, life, in often nearly baroque ostentation. As far as the traditional forms of Church music were concerned, the key personality of modern trends was Gombert "the divine."

Nicolas Gombert has a very uncertain biography. Born in some town in Flanders before 1500, he is said to have studied with Josquin des Prés, was first a singer and later a master of the choristers in the Imperial chapel at Brussels, became in 1534 a prebend and, some time later, a canon, at Tournay, seems to have gone to Madrid in 1537 in the service of his emperor (both the Netherlands and Spain then being parts of the German Empire of Charles V), and died after 1555, possibly in Tournay.

Most of his works were motets and Masses. His only contribution to secular music was a book of French *chansons*. Like his religious music, they shunned the customary four-voice setting; Gombert's normal polyphony had five, if not six, parts.

This unusual number of voices testifies to a taste for compact writing. Some contemporary confirms this taste when he commends Gombert for having done away with the many

rests that composers of the preceding generation had cherished.

Gombert deviated from the musical language of the immediate past in many other respects, and in a similar way as, two generations before, Ockeghem had deviated from the ideals of Dufay. He was uninterested in symmetry and the neat partitioning into sections, and often concealed caesuras between the sections in favor of an endless, even quaternote progress of his contrapuntal melodies. Josquin's harmonic leanings and his chains of consonant chords were given up; in the polyphonic weaving of his parts, Gombert, with gusto, would violate the rights of the ear in reckless frictions.

This he did not do to illustrate some challenging word of the text. His attitude towards the text was a truly humanistic faithfulness, with due respect for correct and often syllabic enunciation of individual words as well as of sentences. But he carefully kept from word-description, just as he kept from *soggetti cavati* and other 'artifices.'

Gombert's delight in density, size, and weight was a common feature of the age. By the middle of the century, it led in Italy to the birth of a polychoral style.

The term denotes the massing and opposing of two or several choruses, either vocal or instrumental, or even partly vocal and partly instrumental. Contrasting in range and in color, placed on different sides of the room, and acting now together in a solid mass, now against each other in a light-and-shadow contrast, these *cori spezzati*, or 'split choruses,' created an unheard-of power and that three-dimensional depth so dear to all the arts of the Baroque.

Though all polychoral music finally derives its basic idea from the age-old oriental antiphony, it was established in its new harmonic and polyphonic form in 1550 when Adriaen Willaert (d. 1562), the Flemish chapel master of St. Mark's in Venice, wrote a set of psalms for Vespers and gave them to two half-choruses placed upon the two opposite organ lofts of his cathedral. To avoid an obvious misconception, it must be

said that in Willaert's time St. Mark's had not more than seventeen singers.

So much was the polychoral style in keeping with the taste of the Baroque that it lasted altogether more than two hundred years, into the age of Mozart in his Salzburg days. We shall in due time revert to its fate.

TUDOR ENGLAND, despite the antimusical trends of the time, had her three great T's: Taverner, Tye, and Tallis. All three specialized in spiritual music and marked the confused transition from the Church of Rome to the Church of England.

John Taverner of Lincolnshire (d. 1545), organist at Oxford from 1526 to 1530, was imprisoned for Protestant heresy but subsequently freed because "he was but a musician." He introduced the Franco-Flemish polyphony into England, mastered it as well as any continental composer did, and gave it not only to Masses and motets, but also to a curious form of instrumental music which was received with favor and lasted from his time to the days of Purcell: the *innómine*. Meaning 'in the name' (of God), it was a polyphonic composition, either for the virginals or else for an ensemble, or consort, of viols, upon an unchangeable *cantus firmus* taken from a certain Catholic antiphon in the first Church mode, or Dorian, *Gloria tibi Trínitas*. A version, also instrumental, of his motet *Quemadmodum* (which has no text except this incipit) is recorded on AS 97.

Christopher Tye (c. 1500-1572) was connected mainly with Cambridge, Ely, and Oxford, and was given the degree of Doctor of Music by both the universities of Cambridge and Oxford. He wrote *The Actes of the Apostles, translated into Englysche Metre* for four voices in a popular style (1553), and in a similar spirit he seems to have created the earliest anthems.

The *anthem* (a word that derived via Old English *antefn* from Greek *antiphonon*) was an Anglican motet. It differed from the Catholic motet of the sixteenth century in its English text, syllabic diction, square rhythm, and a chordal rather than polyphonic style.

Thomas Tallis (c. 1505-1585), organist of Waltham Abbey, Essex, and, later, Gentleman of the Chapel Royal, has been called the founder of English cathedral music and was at least one of its greatest masters. Among his English anthems and Latin Masses and motets, one remarkable relic impressively shows the ties between the musical styles of England and Italy: a Catholic motet *Spem in alium numquam habui* for no less than forty voice parts in eight choruses, written at about the time when the Italian Alessandro Striggio gave the same number of voice parts to his motet *Ecce beatam lucem*. The gigantic motet of Tallis—never printed while the master was alive—is now available in an edition of the *Tudor Church Music* (1928).

IN THE SECULAR FIELD, the *chanson*, which the paragraph on Gombert has touched upon, was perhaps the finest contribution that France has made to music. Elegant, dainty, and lightfooted, never interrupting the even flow of melody, it closely followed an amorous and often indelicate text and rendered the words with a charm that musical forms have rarely achieved. One of its characteristic traits was a dactylic beginning—long—short—short—on one repeated note. In the decades of its bloom, between 1530 and 1560, its four voice parts were moderately polyphonic in an unscholastic way and often even chordal.

Chansons are usually sung in modern concerts by choruses. This is not correct, either historically or artistically. The majority are so nimble and transparent that only a rendition by four solo singers or, much better, by one singer and one (or

more) instrument can do them justice (cf. AS 15 and 45).

Our plate XIII shows the typical performance of a *chanson* with photographic exactness and reliability. The music on the table (enlarged and inverted in the detail) is Claudin de Sermisy's *Jouyssance vous donneray*, which Pierre Attaingnant printed in 1531 in his *Trente et sept Chansons*. The transverse flute plays the upper part, the singer reads another voice, and the lutanist, without a part book, puts up with the two remaining parts.

Besides Sermisy (pron. -eezéc), the outstanding composer of *chansons* was Janequin.

Clément Janequin or Jannequin (equivalent of Johnnie), according to this name very probably from the northeast of France, was presented in 1544 for the curacy of Unverre not far from Chartres in the southwestern neighborhood of Paris, and acted as its curate at least in 1556. Three years later, he described himself as living in poor old age, and thus was probably born as early as the preceding century.

When the printer Adrien Le Roy in Paris published Janequin's works in 1559, he prefaced the collection with a sonnet that the famous poet Antoine de Baïf had made in honor of Janequin. It ended in the following six lines:

When he composes motets with their mighty words,
When he attempts to represent the din of battle,
When in his songs he renders women's clack and prattle,
When he depicts the chirping voices of the birds,
In all that Janequin has tried to design,
He never has been mortal, but is all divine.

—transl. C. S.

The first four of these lines sum up the essentials of his works: motets and *chansons* of a descriptive character, in which, among other subjects, the battle of Marignano (*La Guerre*), babbling women (*Le Caquet des Femmes*), singing birds (*Le Chant des Oyseaux*) are depicted with incomparable skill and taste (AS 7, 45).

At that time, all nations shared in this delight in descriptive music. Lorenz Lemlin wrote a *Gutzgauch*, or Cuckoo, in 1540;

Hans Neusidler a *Battle of Bafia* (Pavia) in 1544; Gombert, a *Chant des Oyseaux* in the same year; Massimo Trojano, a *Battle of the Cat and the Crow*, in 1567; Adriano Banchieri, at a date unknown, a *Contrappunto bestiale alla mente*, representing a dog, a cuckoo, and an owl. And the list could easily be enlarged.

AS 51 records a closely related character piece, *The Bells of Speyer* (*Kling klang*) by the greatest Swiss composer of the time, Ludwig Senfl (c.1492-c. 1555).

THE MADRIGAL, in a way the Italian counterpart of the French *chanson*, had little, if anything, in common with its older namesake of the fourteenth century except the freer character of its texts. Dealing with beautiful nature, love, and birds, it had neither regular stanzas nor refrains. Musically, it was meant to be a refined vocal chamber music, not of accompanied soloists, but of three or four, and later five or more, amateur singers gathered around a table with their voice parts spread before them. The parts were in perfect balance without discrimination in importance, without a leading melody, a *cantus firmus*, or an accompaniment, and yet independent enough to catch the personal interest of the partners.

The earliest madrigals, written by the Flemings Philippe Verdelot and Jacob Arcadelt and by some Italian masters, were published by a Roman printer in 1533. In their predominantly homophonic texture and their emotional restraint, they show a certain relation to the older *fróttola*, which the generation before had used for the same purpose of refined social entertainment.

But from the 1540's on, under the leadership of the Flemish Venetians Philippe de Monte, Adriaen Willaert, and Cypriano de Rore, the madrigal had, as an average, five voice parts, a more polyphonic, motet-like style, and a growingly emotional attitude.

In this emotional attitude, both masters, Willaert and Rore, pushed on to unheard-of, audacious chromaticisms. (Chromaticism is the use of more than seven notes per octave, unless the additional notes serve as modulation, or logical passage, into some other seven-note scale.) They invented chromatic melodies proceeding in semitones throughout the octave and wrote chromatic harmonies in strangely modulating chords.

It is hardly an accident that at the same time, around 1560, the composer and theorist Nicola Vicentino, who lived in Venice as a pupil of Willaert's, designed a complicated keyboard for a super-organ or super-harpsichord (*arciórgano*, *arcicémbalo*) with thirty-one keys per octave on six manuals, in order to produce all the shades of the diatonic, chromatic, and enharmonic genders of the Greeks, who once again stood involuntary sponsors to modern developments. (The genders of Greece are explained in the third chapter of this book on page 36.)

The reader must be warned, however, that in the sixteenth century the term *madrigale cromático* often meant only a madrigal where blackened notes and hence a faster tempo prevailed.

Our modern choral conductors should keep in mind that the madrigal was strictly chamber music of soloists and must not be performed by choruses—exactly like the French *chanson*. Would we tolerate orchestral renditions of Beethoven's string quartets?

Besides and after the madrigal, the Italians created, in the second third of the century, a vigorous antidote in their *villanelle* and *villote*.

The name (canzona) *villanella* or *villanesca*, which appeared from 1541 on as the title of a seemingly Neapolitan form of folksong, should not be translated as a rural, but rather as a loutish, song. Far from being rustic, *villanelle* were printed as an uncouth and often parodistic reaction against the sophisticated refinement of the madrigal, and they displayed so consummate a contempt of the rules of harmony and counterpoint

that their three voice parts often proceeded in parallel triads (as, after centuries, in some scores of another Italian, Puccini). Indeed, as Thomas Morley said in his *Introduction* of 1597, these "countrie songs" were "made only for the ditties sake, . . . a clownish musicke to a clownish matter." A few years later, the *villanella* helped in creating the German drinking song.

The *villota*, printed from 1535 on, was, on the contrary, a true folk dance-song from various Italian provinces. Once more, the melody was in the upper voice, while the three lower (instrumental) parts followed strictly in chords.

The *fróttola* seems to have had its last publication in 1531.

The Spanish term *villancico* must not be confused with the similar Italian names. It denoted a song of several stanzas, or *coplas*, between refrains, or *estribillos*, in the exact form of a French *virelai* (cf. pages 84 f). Although earlier *villancicos* had been written for three or four voice parts in a conduct-like note-against-note style, the masters around the middle of the sixteenth century transformed this rigid setting into what amounts to actual song melodies with the accompaniment of a *vihuela* (large guitar). AS 17 has recorded four *villancicos* and *romances*—epic songs with four lines to the stanza—of the most eminent composers around 1550: Miguel de Fuenllana, Juan Vásquez, Diego Pisador, and Luis Milán, musician at the court of the viceroy of Valencia.

These Spanish songs are unique in the marvelous blend of aristocratic and popular attitude. On hearing them, one readily understands that in a country of an art so national in the best sense of the word, there was no room for French *chansons* or Italian madrigals.

MUSICA RESERVATA. Altogether, vocal music was undergoing essential changes in the relation between text and melody. A glance at older works, especially Masses,

shows more concern with writing good contrapuntal settings than with an adequate rendition of the text. Indifferent to the meaning and accents of the holy words, composers expected the singers to distribute the well-known syllables as they deemed best.

A different attitude set in with Josquin des Prés, the mature Renaissance, and humanism. The medieval conception that the mere presence of a holy text gave a voice part significance, yielded to the modern conception that such practice had to give satisfaction to the ear. By 1552, when the Fleming Adriaen Petit Coclicus was publishing his often quoted *Musica Reservata*, it had become a serious prerequisite of decent writing to apply the text to its proper place and to avoid setting a long note to a short syllable or vice versa; "for music has much in common with poetry."

William Byrd found a less wooden expression of the same idea when he printed his *Psalmes, Songs, and Sonnets* of 1611 "framed to the life of the words."

Shortly before him, another Englishman, Thomas Morley, had revamped the train of thought of the *Musica Reservata*. "If the subject be light," he said in *A Plaine and Easie Introduction to Practicall Musicke* (1597), "you must cause your musick to go in motions, which carry with them a celeritie or quickness of time, as minimes, crotchets, and quavers; if it be lamentable, the note must go in slow and heavy motions, as semibreves, briefs, and such like." And he proceeds:

"Moreover you must have a care that when your matter signifieth ascending, high heaven and such like, you make your musick ascend: and by the contrarie where your dittie speaks of descending, lowness, depth, hell and others such, you must make your musick descend. For as it will bee thought a great absurditie to talke of heaven and point downward to the earth: so it will be counted great incongruity if a musician upon the words he ascended into heaven should cause his musick to descend." And later:

"We must also have a care so to applie the notes to the

wordes as in singing there be no barbarisme committed: that is, that we cause no syllable which is by nature short, to be expressed by many notes, or one long note, nor so long a syllable to be expressed with a short note."

From this new deference to the word, as expressed in Coelicus and Morley, one way led to the *vers mesurés* of the French, the antipolyphonic slogans of the Council of Trent, and the *stile recitativo*, and another way to the pedantic servile transcription and illustration of individual words and their meanings, which held the musicians of the Baroque spellbound from the motets and madrigals of the late sixteenth century to the sterile theory of 'affects' (*Affektenlehre*) in the rationalistic eighteenth century: rendering the concepts of ascent and descent by rising and falling groups of notes, or 'cross' by two dovetailed melodic steps.

I NSTRUMENTAL MUSIC. Adriaen Willaert, outstanding in Masses and motets, *chansons* and madrigals, also played a leading role in shaping a new instrumental form, the motet-like, imitative *ricercar*, which has been described in the previous chapter. Since *ricercari* of this kind were printed in separate part-books, they certainly were meant for various instruments (of any kind).

Along with the strict, polyphonic *ricercar*, the organists and, at their head, the great master at the second organ of St. Mark's in Venice, Andrea Gabrieli (c. 1510-1586), created the free, homophonic *toccata*, or 'touch-piece,' in which full chords alternated with brilliant passages. The master at the first organ of St. Mark's, Claudio Merulo (1533-1604) merged the two forms by introducing imitative (*fugato*) episodes into the *toccata*.

Music for keyboard instruments, and also for lutes, reached its climax, however, in the truly instrumental form of the *variation*.

There can be no doubt that varying a given theme had been a customary practice of players long before the form appeared in prints and manuscripts; variation is after all the only way for skilled musicians to stand a number of repetitions that the stanzas of a song or the consecutively entering couples of a dance impose.

A solitary, unprecedented, and unimitated set of variations on a song, the Mills of Paris, appears, indeed, sometime in the fourteenth century. In its uniqueness, it clearly shows that variation existed long before it became a written form. The innovation of the sixteenth century was not anything fundamentally new, but rather the generalization of the case of the Mills: careful planning instead of improvisation.

Variation appeared in the sixteenth century in its two basic forms, as *grounds* and as *paraphrases*.

The *ground*, or *basso ostinato* (obstinate bass), best known from later *passacaglias*, is the continual repetition of a short motive at the same pitch and, as a rule, in the bass while the other voice parts counterpoint with more or less freedom. It is foreshadowed in motets of the thirteenth century; the earliest sixteenth century example is a virginal piece by an English canon, Hugh Aston or Ashton (d. 1522), *My lady Carey's Dompe* (an Irish lament, properly spelled *dumpe*).

The *paraphrase*, as we will call it, is a set of sections in which some popular dance or song appears, first in its original simple form and subsequently disguised in ever changing paraphrases. The mature style of this type of variation is due to the Spaniards, who called it *glosa* or *diferencia*. Luis de Narvaez (1538) gave it to the lute, Diego Ortiz (1553) to the viol (AS 40), and Antonio de Cabezón (1510-1566) to the organ (AS 69), which, contrary to the situation in Italy, had developed in Spain to match northern color and versatility.

Songs and dances were, as a matter of course, just as well performed without variations. Numerous printed collections of the time for lutes or keyboard instruments abound in plainly harmonized notations of *Lieder*, dances, and *chansons*.

The *chanson*, however, though at first arranged for lute much in the original form, was destined for a more momentous future. For the time being, however, from 1542 on, it was translated into a specific type of keyboard music which shared with its vocal model the lightfootedness, clear disposition, and characteristic *fugato* beginning on a dactylic one-tone motive (long-short-short), but which was drawn out much longer than the singing form had been. As an instrumental form, it was called in Italy *canzone francesca* or *canzona da sonare*. (The Italians of the sixteenth century used two forms: *canzona*, plur. -e, and *canzone*, plur. -i.)

DANCE MUSIC underwent decisive changes in the direction of sturdiness and jollity. The dignified pavan was given a lighter form in the *passamezzo*, or *passo e mezzo* ('a step and a half'), which was, from 1536 on, a favorite in collections of lute music. Seven years earlier, the bold and wanton *galliard* had appeared, a lively pattern of leg thrusts and leaps in $3/4$ at about $\text{♩} = \text{MM } 90$, which reminded some spectator of a cockfight. And with the galliard came the lively, zigzagging *courantes* in $3/4$, which Shakespeare's *King Henry V* called "swift corantos." Two other tempestuous dances were added in the fifteen-fifties: the tap-dance *canaries*, a play of heel and sole in a hasty dotted rhythm, was mentioned first in a Spanish source of 1552; and in 1556 the court of Paris introduced from Provence the boastful, strenuous *volta*, in which the gentleman turned and flung up his lady.

Besides this motley lot of couple dances, the time readmitted the playful, pantomimic circle dances, or *branles*, which had been taboo in the generation before; and the musicians—so we hear—played them in suites, one of every kind, in the order of increasing lightness and tempo: a sedate *branle double* for the older people, a brisker *branle simple* for the younger married couples, a rapid *branle gay* for the unmarried, and

faster and faster up to the *branle du Hault Barrois* (called after one of the provinces), which "should be good to dance in the winter to make oneself warm," and to the hasty, skipping *gavotte*. This was a typically 'dynamic' arrangement as opposed to the classical order of contrast in alternating tempi (cf. AS 6, 36, 40).

Around that time, one kind of dance split off to lead a separate life: the *march*. In earlier times, the fifers at the head of military formations and the town pipers who played for civil parades and corteges probably availed themselves of dances and catchy songs in regular rhythm. We know from Thoinot Arbeau's excellent manual on the dance of his time, the *Orchésographie* (1588), that the pavan, for instance, served "when a bride of good family proceeded to church, or when priests, or masters and members of important corporations were to be escorted in dignified procession." Arbeau connects the march and the dance so closely that he gives not only a long introduction on the army-drum strokes and rhythms, but also adds the proper drum meters, dactylic or otherwise, to every type of dance.

The earliest marches, as such, appear in *My Ladye Nevells Booke* for harpsichord in 1591: *The Marche before the Battell*, *The Marche of Footemen*, *The Marche of Horsmen*, *The Irishe Marche*, *The Marche to the Fighte*.

INSTRUMENTAL MUSIC proved to be so important that the various families of instruments were given playing methods. The player and manufacturer Hans Gerle in Nürnberg wrote a *Musica Teusch*, or Music (explained) in German (1532), for the use of violists and lutanists. But after him, the accent shifted to the south of Europe. The Italian Silvestro Ganassi of Fontego, near Venice, wrote in 1535 *La Fontegara* as a method for playing the recorder or whistle flute—which then was much more important than the trans-

verse flute—and in 1542 and 1543 a *Regola Rubertina* for the viols. And after his contributions, the Spaniards took over. The monk Juan Bermudo published a comprehensive manual under the title *La declaración de instrumentos* in three editions between 1549 and 1555; Diego Ortiz, a chapel master to the Viceroy of Naples, printed a method for viols, the *Tractado de glosas* (1553); and in 1565, Tomás de Sancta Maria came out with a thorough method for keyboard and other instruments, the *Arte de tañer fantasía*.

The general, extra-instrumental theory of the time reached a climax in two personalities which have almost become symbols of their time: Glareanus and Zarlino.

GLAREANUS AND ZARLINO. Music had reached a critical point at which contrapuntal was yielding to harmonic conception, and the Church modes, to our modern major and minor. The crisis became manifest in two renowned theoretical works.

The earlier was the *Dodekáchordon* of the Swiss Henricus Glareanus (1547), a humanist who, under this learned title, presented a 'twelve-mode' system by adding to the age-old eight Church modes, four additional modes: the Aeolian on A and the Ionian on C, and each with its *hypo* parallel, that is, Hypoaeolian on E and Hypoionian on G. This eleventh-hour addition of modes that the Church never did accept was nothing but a humanistic attempt to recognize the factual existence of minor and major by making peers of the two no-longer-avoidable commoners.

How far the major mode had driven back the modes of the Church appears from Glareanus' statement that Ionian was the *modus omnium usitatissimus*, the most current of all the modes.

The second work, more progressive and more important, was the epochal volume *Le Istitutioni harmóniche* (1558) of

the great Gioseffo Zarlino (1517-1590), Cypriano de Rore's successor as the chapel master of St. Mark's in Venice. It established both the major and the minor third as the dual fundament of all harmony and determined their ideal sizes by the (mathematically so-called) harmonic and the arithmetic division of a vibrating string. The harmonic division consisted of the progression 2:1, 3:2, 4:3, 5:4; and the arithmetic division, in the progression 6:1, 6:2, 6:3, 6:4, 6:5. The following graph represents the two strings, their divisions, and the resulting intervals:

| | | | | | |
|---|----------------|-----|-----|-----|-----|
| . | . | . | . | . | . |
| | 5:4 | 4:3 | 3:2 | 2:1 | |
| C | E | (F) | G | c | |
| . | . | . | . | . | . |
| | 6:5 | 6:4 | 6:3 | 6:2 | 6:1 |
| C | E _b | G | c | | |

From Zarlino, the road of harmonic theory led directly to Jean-Philippe Rameau and his *Traité de l'Harmonie* of 1722 (cf. Chapter 16).

Although the minor third had been made reputable by Zarlino, this interval was not considered consonant enough to serve in the final chord of a piece. Down to the times of Bach, all compositions in the minor mode ended in an open fifth or else in a triad with the major third—which indeed adds to its finality, even from our modern viewpoint. This unexpected, startling major third has, for reasons unknown, been called the Picardian third. As late as 1757, Johann Christian Bach rebelled against this rule: "Why must one end a minor piece on a major chord?" he wrote to his old master Padre Martini.

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LISTENING: AS 6, 7, 15, 17, 36, 40, 45, 51, 69, 97.

12

THE AGE OF PALESTRINA AND LASSUS

1564-1600

THE BEGINNING of a new age, generally called the Baroque, was marked by the foundation of the classical Academy of Poetry and Music in Paris, the classicism of the Florentine painter Angelo Bronzino and that of the poet of *Jerusalem Delivered*, Torquato Tasso, and the adoration of the strictly classical Vitruvian rules in the architecture of Italy and France, particularly in the works of Palladio. The details of this development can be read in the author's *Commonwealth of Art*, New York, 1946, pages 125 ff.

All classicism and, for that matter, all neoclassicism, aims at clarity.

It was this aim that provided the uniting tie between the seemingly antipodic trends of music in the last third of the sixteenth century—between Palestrina's serene, unearthly Masses, Gastoldi's earthly, catchy *balletti*, Galilei's gloomy laments, and the beginnings of the recitative.

The common victim that all the 'modern' groups and masters immolated as the scapegoat on the altar of clarity was counterpoint, or, better, the monopoly and misuse of the polyphonic style. Counterpoint, to them, meant an involved technique for the sake of technique, skill at the cost of expression, confusion at the price of clarity; and they rejected it.

Paradoxically enough, the earliest among the great masters

connected with this recession from counterpoint as an end in itself, was the arch-contrapuntist to whom present-day teachers turn for advice and example: Pierluigi (Peter Lewis) da Palestrina.

PALESTRINA'S LIFE is easily told. Born probably in 1525 at the town of Palestrina, southeast of Rome, he was sent in 1534 to the pontifical church of Santa Maria Maggiore in Rome to serve as a choirboy and, some time after his mutation (1539), as the *magister puerorum* to train the boys in the Cappella Giulia at St. Peter's. Next, he spent years as the organist and *maestro di cappella* in the cathedral of his native town. Then began the brilliant part of his career. He became chapel master at St. Peter's in Rome in 1551, and four years later, in 1555, one of the twenty-five singers in the pontifical, Sistine Chapel—the highest honor that could be bestowed on a musician in Rome. After a few months a new, severer pope, Paul IV, removed him from that august body for being a layman and married at that, but, again after a few months, gave him the position of a chapel master at the Lateran basilica. Resigning this post in 1560, he went on in the odd and restless circle of his life. In 1561, he was appointed *maestro di cappella* in Santa Maria Maggiore, only to retire in 1567. After four years spent outside the Church, he returned in 1571 as the chapel master to St. Peter's with the honorary title of *maestro compositore*. And this was the last stop in the narrow orbit of his professional life.

After the loss of several sons, his wife died in 1580. In his affliction, he applied for admission to the priesthood and was given the tonsure. However, as soon as the following year, he left the clerical state and married the widow of a well-to-do furrier, whereupon we find the most unworldly composer of Christendom engaged for years in the honorable but thoroughly worldly trade of pelts and furs in a managerial capac-

ity. And it is only fair to add that during that time of selling and buying he created some of his profoundest works.

He met his death on February 2, 1594.

Palestrina's musical world-fame was established by a corpus of ninety-four Masses, two hundred and eighty motets, sixty-six offertories, forty-one hymns, thirty-five *Magnificats*, and numerous lamentations, litanies, psalms, and madrigals, many of which are still in the active stream of Catholic music in and outside the Church, as the paragons of supra-personal serenity, austere, uncompromising purity, and powerful simplicity.

It needed thirty-three tomes in folio and more than forty years (1862-1903) to reprint this gigantic life-work in a modern edition.

Palestrina's popular fame, however, was established by the legend that his intervention saved the music of the Church from the hands of fanatical purists. The legend, told over and over again and recently used as the subject of Pfitzner's German opera *Palestrina* (1917), has connected the master and his work with the proceedings of the music committee within the Counterreformational Council of Trent (1545-1563).

It is true that all the members of the committee wanted a thorough purge of liturgical music. But while the extremists were ready to sacrifice polyphony in any form to the sober, single line of the Gregorian chant, their moderate opponents were satisfied with stripping polyphonic music of secular *cantus firmi* and 'artifices,' of unrest and confusion. Since a decision was not reached, the Pope appointed in 1564 a special congregation of eight cardinals and eight singers of the Papal Chapel to settle the fateful problem.

It is not true that, within this body, a victory of the radical wing was averted only because Palestrina, hastily composing a few Masses in a moderate style with the famous Marcellus Mass as one of them, stepped in and proved that dignified polyphony and orthodox religious attitude were perfectly compatible.

The legend, and even the authentic proceedings of the Council and the Congregation, disguise the actual issue: the time was ripe for a new outbreak of the age-old war between the classic Italian and the anticlassic northern spirit, between Mediterranean clearness and simplicity and 'Gothic' involution and obscurity. Of eight singers in the Congregation, five were Italians, two Spaniards, and only one was a Netherlander—nothing could better show that the northern predominance in Italian music was drawing to a close.

One of the two Spaniards in the Chapel was the unforgettable Tomas Luis de Victoria (c. 1540-c. 1613), who added the ardent mysticism of his homeland to the solemn aloofness of the Roman style.

Most people who think or speak of the so-called Palestrina style are under a disastrous illusion. Alas, the solemn, ethereal chords and the simple, stately voice parts of Roman polyphony were never heard in the sober form that the scores suggest. The Romans counted on the art of melodic *diminution*, however little such practice seems, from our viewpoint, to be a logical one in Rome. The singers of the Papal Chapel were famous for their skill in dissolving the plain notation on their music sheets in fluent graces and coloraturas. Upon seeing the few of Palestrina's motets that contemporary masters wrote down in the form in which they were performed, we experience a disillusion about as great as the one that our fathers had when they realized that the temples and statues of the Greeks had not been white.

The old coloratura improvisation of the Orient and the Mediterranean had entered the extra-Mediterranean districts of Europe with the early Gregorian chant and did not part from them for a thousand years. Down to 1800, notation was a mere skeleton that the performer had to cover with flesh and skin and hair. For the West felt, like the Hindus, that "without graces music is bald." Adriaen Petit Céclicus, one of Josquin's disciples, expressed the idea picturesquely when he said in his *Musica Reservata* of 1552 that the composer's melody

was always simple, commonplace, and crude, unless the singer made it elegant, indeed, unless he spiced the meat with salt and mustard.

NATURE, often prone to lift two different peaks instead of one to tower over the minor hills of an age, contrasted the contemplative Palestrina, who never traveled, hardly ever looked beyond the choir stalls of Roman basilicas, and practically never deviated from liturgical forms and the liturgical Latin, with the dramatic Lassus, a man of the world and a versatile master in all the forms of the time in any of the four leading languages.

Among the more than two thousand works of Lassus, there are no less than five hundred and sixteen motets, out of more than a thousand, united in the six volumes of his *Magnum Opus Musicum*, some of them overwhelming in the powerful polyphony of six and eight voice parts (AS 104 B). There are the seven Penitential Psalms of 1565, which Duke William of Bavaria ordered copied in one of the most precious illuminated manuscripts of the sixteenth century. There are Masses, many of which were built on secular *chansons* although the Council of Trent had interdicted the parody form (cf. page 131). There are one hundred *Magnificat* settings. And there are his *chansons* themselves, in which he spans the whole range between the boldest briskness and a tender intimacy.

Roland de Lassus, or Orlando di Lasso as the Italians named him, was born in Mons in Hainaut about 1525—approximately the time of Palestrina's birth. When he was a boy, the exceptional beauty of his voice allegedly led to three consecutive kidnappings. When twelve years old, he left his homeland and began to travel in the retinue of dignitaries. He saw Milan, Sicily, Naples, was for a time the chapel master at the Lateran in Rome, returned to the North to live in Antwerp, England,

and (later) France, accepted in 1556 an appointment as the conductor at the ducal court of Bavaria, and stayed in Munich until, in 1594, the year that also took Palestrina away, a merciful death released him from the deep melancholy of his later years. Not many composers have been honored as Lassus was: Emperor Maximilian II conferred nobility upon him and the Pope made him a knight of the Golden Spur.

THE HUGUENOT PSALTER. The antipolyphonic and antiseccular austerity that appeared in the Counterreformation of the Catholic Church showed much more strongly in the liturgies of the Swiss reformers, of Zwingli and Calvin.

Even before the psalms of David had been appropriated by Calvin's Church as its only poetic and musical expression, Clément Marot—one of the most frivolous of poets not long before—had translated them into his mother tongue and dedicated his texts to:

. . . the ladies and the maidens
 Whom God creates to be his shrine,
 But who, forgetting hymns divine,
 In halls and chambers entertain
 Their guests with words and airs profane.

—transl. C. S.

The English Calvinists chimed in.

Depart, ye songs lascivious,
 from lute, from harpe depart:
 Give place to Psalmes most vertuous,
 and solace there your harte,

we read in Archbishop Parker's Psalter, which was printed only in 1567 or 1568, but had already been finished by 1557.

Musicians abjured any music connected with licentious words with expressions no less energetic than those used by

the poets. When—a while after the Dutch had published their *Souterliedekens*, or Psalter Songs—Claude Goudimel printed in 1551 the earliest French musical version of Marot's psalter, he emphasized in the preface that music was sacred, "although today we see it desecrated by lascivious, peppery, impudent songs."

This first version of the psalter must have antedated Goudimel's conversion to Calvin's doctrine, for he still published Catholic Masses as late as 1558. Anyhow, this version would hardly have been acceptable to the reformed liturgy proper. The austere and almost ascetic sobriety of Calvinism represses music as it condemns the painted or carved image—the words of God must not be pretexts for musical sophistication. Reformed churches often have no trained choirs; in unison, the congregation itself sings the psalms, which nameless composers have patched together out of scraps from popular songs.

But for use at home—*ès maisons*—elaborate forms were admitted and even encouraged. The singing of the psalter around the dinner table to keep the minds from worldly, futile thoughts did not shun the charm that polyphonic art conveys to the audience as well as to the performers themselves. It was on the ground of such religious chamber music that the greater masters were allowed to contribute to the reformer's work. They did so in two separate ways: on the one hand, in a simple, easy version, with a syllabic melody in the tenor and a chordal harmonization; on the other hand, in a rich and free polyphony for well-trained singers (AS 12).

Of the two leading masters who again and again recomposed the one hundred and fifty psalms, the older, Claude Goudimel, was born at Besançon about 1505, spent his life apparently without a connection with either the court of Paris or with any church, and, assassinated in 1572 after the massacre of Saint Bartholomew's Night, paid the supreme price for his faith. The younger master, Claude Lejeune, "last polyphonist" and "Phoenix of Music" as the French called him, was born at Valenciennes near the Lowlands about 1528,

became Royal Chamber Composer toward the end of his life, and died at Paris in 1600.

The religious reform was in itself, however, an outgrowth of a general French reversal, similar to the way in which the religious Counterreformation accompanied an Italian reversal in all the fields of art and mentality. It was not only the Huguenots who reacted against the "bad examples" and "dirty melodies" of the immediate past; Catholics, too, were in the opposition. In the 1560's, the poet Jean-Antoine Baïf and the musicians Thibault de Courville and Goudimel took up the metric compositions of the humanists of around 1500, with a long note to a long, and a short note to a short syllable and with all the voice parts singing every syllable at exactly the same time. Claude Lejeune seems to have ended this series of composers with his posthumous psalms and the many *chansons* of his likewise posthumous collection *Le Printemps*—at least so far as the use of the name *vers mesurés* is concerned; actually, even Lully's diction is still under the spell of 'correct' mensuration.

These metrical pieces, or *vers mesurés*, were not only a humanistic bow to the ancient Greeks and Romans in the spirit of the *camerata* in Florence, which will be discussed anon, they were also a part of that fight against polyphony in which the Florentine debaters stood side by side with the Council of Trent. Indeed, they belong to the moral attitude of the Platonists in every land who postulate that all music ought to be controlled in the interest of the community—that disorderly music depraves the conduct of man, while orderly music improves it.

The English also availed themselves of the metric diction of the *vers mesurés* in their new Anglican chant, which, under the guidance of Tallis, Byrd, and Morley, squeezed the Catholic psalm tones into the framework of a simple four-part harmony. Moreover, William Byrd transformed the original concept of the anthem (cf. page 168) into the so-called *verse anthem*, where the choral sections alternate with solo sections.

Except for a few *vers mesurés* in French *chansons*, the reaction against polyphony and sophistication outlined so far belongs in the main to the field of religious music. But there was a typically secular reaction, too. It crystallized around the Italian concepts of *canzonetta*, *balletto*, solo madrigal, and recitativic monody.

THE CANZONETTA (plural -e) was a way out to those who wanted a well-made vocal chamber music but resented the refinement, complication, and stilted preciousness of the later madrigal. First printed in the 1580's (and again abandoned in the 1620's), the *canzonetta* was a simple three- or four-part setting of some unpretentious poem. Sometimes, the voices entered successively with the same motive in *fugato* style, but in most cases the melody, quick-footed, *staccato*, and even pattering, was seconded note by note in the other parts.

One further step led to Giovanni Giacomino Gastoldi's *Balletti per cantare, sonare & ballare*, which were first printed in 1591, often re-edited way down to the eighteenth century, and imitated with gusto all over Europe. In England the first imitation was Thomas Morley's *Balletts to 5 voyces of 1595*, which were published also in Italian and German. *Balletti*, as the name implies, could be sung *ad libitum* or played on instruments or even danced to. They had, on the whole, the easy-going style of the *canzonette*, but differed in having catchy refrains on the playful syllables *fa la la* at the end of their stanzas.

France responded to the *canzonetta-balletto* reaction with the *air de cour*, which was not a courtly song but on the contrary a "vaudeville," in which some soloist was accompanied on a lute (AS 36). England complied with the similar ayre, in which John Dowland particularly excelled (1562-1626). *Canzonette napoletane*, *villanelle*, and *balletti*, said Thomas Mor-

ley in his *Introduction* of 1597, "are by a generall name called ayres."

England had meanwhile adopted and adapted the madrigal itself. William Byrd had already imitated the Italian model on his own responsibility, when an English publisher dared to print in 1588 a collection of original Italian madrigals in English translation under the title *Musica Transalpina*. These two impulses created, under the leadership of Byrd and Morley, the national English madrigal, which, despite its foreign origin, became truly British owing to the particularities of the English language and a greater emotional stress. The public response was extraordinary. Morley himself praised the gentry for singing difficult madrigals at sight as one of its noblest pastimes. This bloom, connected with the most eminent personalities in Tudor music, lasted up to about 1630.

While this form of part-singing was having its earliest triumphs in England, the original, Italian madrigal had entered its final and most sophisticated phase around 1580 under the leadership of Luca Marenzio (c. 1550-1599). On a byway—as a forecast of the impending advent of the opera—it was even allowed to join a novel form, the madrigal-comedy, which reached its peak in Orazio Vecchi's *L'Amfiparnasso, comedia harmonica* (1594-97). The madrigal-comedy consisted of a prologue and a number of madrigals with five voice parts suggesting some dramatic development without any visible action or stage.

Now and then, however, the madrigal was converted into a solo melody with instrumental accompaniment. The outer and probably negligible reason for this change may have been the frequent want of five or six well-trained singers in the ranges required; one singer and one lute or a harpsichord were usually at hand. The inner, more decisive reason was the increasing trend towards monody: the simple melody of one accompanied singer moves the heart more than a polyphonic ensemble, Gioseffo Zarlino said in the *Istituzioni* of 1558.

The solo madrigal, to be sure, was nothing but a prepara-

tory makeshift. Its setting was still polyphonic, the voice parts were still equal in importance, and, because they were skilfully interwoven, the self-styled soloist often had to withdraw from the listener's attention after a couple of bars to allow one of the other voice parts to emerge and spin out the melodic line. Necessarily, wrote Lodovico Viadana in his *One Hundred Spiritual Concerts* (*Cento Concerti Ecclesiastici*, 1602), the solo part is often interrupted and lacks in regular cadence and cantability.

INSTRUMENTAL MUSIC for several instruments, such as the ensemble that Paolo Veronese depicted with an almost photographic exactness on his gigantic canvas of the Wedding at Cana in the Louvre, was still, in the main, a rendition of properly vocal music. Indeed, of the *Chansons musicales* that the Parisian printer Pierre Attaignant published in 1533, those best suited for instruments were expressly edited for cross-flutes and recorders; Nicolas Gombert had his motets of 1539 and 1541 *accomodata* for viols and wind instruments; and not much later, many collections of appropriate pieces had the subtitle *da cantare ò toccare* (to be sung or played) printed on their frontispieces. More specifically, a reliable description of a ducal wedding at Munich in 1568, given by Mássimo Trojano, an Italian musician who was serving in the Bavarian court orchestra under Orlandus Lassus, relates that five Zinken, or cornets (short wooden horns with fingerholes), and two trombones played one of Lassus' motets at table, and that another polyphonic piece of the master, probably a motet, too, was performed by twenty-four instruments, viz., eight viols, eight violins, and eight wind instruments.

But out of this current practice, the time was creating an exclusively instrumental form. Several times, Trojano himself had to record the performance of *canzone francesi*, which in

his time had passed from lutes and keyboard instruments to chamber ensembles (cf. AS 25). This generation also knew *ricercari* of a somewhat freer style under the names of *capricci* and *fantasie*.

These musical forms may have constituted, to a great extent, the programs of the famous court ensembles of northern Italy and particularly of those of the Este in Ferrara, about which we read at the end of Ilércole Bottrigari's dialogue *Il Desiderio overo [or] de' concerti di varij strumenti musicali*, Venetia 1594. There we learn what a huge and precious musical library the performers had at their disposal and how many instruments, which all, he says, "are always in playing condition and tuned, ready to be picked up and played on the spur of the moment."

Among the Este performers, there was a celebrated ladies' ensemble of the highest quality. "You would," writes Bottrigari, "see them betake themselves in Indian file to a long table, upon one end of which a large harpsichord is laid [Italian keyboard instruments could be taken out of their cases]. Silently they entered, each one with her instrument, be it a stringed or a wind instrument, . . . and gathered around the table without the slightest noise, some sitting down, some standing, according to the nature of their instruments. At last, the conductress faced the table from the other end and, after having made sure that the other sisters were ready, gave them noiselessly the sign to begin with a long, slender, well polished baton. . . ."

England had a similar development in her consorts and their music.

The name *consort*, a misspelling of *concert*, appeared for the first time when the composer and publisher Thomas Morley printed in 1599 *The First Booke of Consort Lessons, made by divers exquisite Authors, for sixe Instruments* (two viols and four plucked instruments). Such an ensemble of different instruments was called a 'mixed' or 'broken' consort; a 'whole' consort, on the contrary, was meant for instruments of the

same family, generally for viols, which then were held in a 'chest' or homogeneous set.

The form of music particularly written for consorts was fancies in a fugato style somewhat freer than the *ricercare* style of the Italian *fantasie*. "A musician," Morley said in 1597, "taketh a point at his pleasure, and wresteth and turneth it as he list, making either much or little of it according as shall seeme best in his own conceit."

MUCH MORE MOMENTOUS than the development of the consort was the English contribution to creating a true harpsichord music which, emancipated from the strictness of polyphony and regular voice-part setting, took the fullest advantage of the manifold chord and passage possibilities that the keyboard offered.

More than five hundred pieces by Elizabethan 'virginalists' have been preserved in special handwritten or printed collections of the time, which approximately span the production from 1575 to 1625. The oldest is the copy of forty-two of William Byrd's compositions in *My Ladye Nevells Booke* of 1591, and the most important is the famous handwritten *Fitzwilliam Virginal Book* in the Fitzwilliam Museum at Cambridge, England, which contains almost three hundred pieces and cannot have been copied before 1621. The *Parthenia* or the *Maydenhead* of 1611 was, on the other hand, as the title says, "the first musicke that euer was printed for the Virginals."

Two generations of precursors, the first with Hugh Aston in England and the second with Antonio de Cabezón in Spain and a good many Italians, had provided the leading forms of Elizabethan harpsichord music: the *ostinato* ground and the *coloratura* variation of popular songs of the time. But when William Byrd took possession of these traditional forms, he gave them a mastery, power, and poetical charm that the earlier masters had hardly achieved (cf. AS 14, 2000 Y). He

also added to their interest by an almost imperceptible shift—in the mildest forms—from the realm of absolute music to that of descriptiveness.

A group of younger Britons followed Byrd's example, among them the organist Thomas Morley (1557-1603), the "Bachelor of Musick" Giles Farnaby (b. c. 1560), and the good-humored Dr. John Bull (c. 1562-1628), who did not write 'King's Hunt,' but did depict "Himselfe" in a remarkable piece with a few surplus notes which sound like a critical question mark. This is not a solitary self-portrait in Elizabethan music: Anthony Holborne, courtier and lutemaker, also published, in 1599, a consort for *Viols, Violins, or other Musicall Winde Instruments* under the title *My selfe*.

The English virginalists came to a peak and conclusion with a still younger master, Orlando Gibbons of Cambridge (1583-1625), upon whom the university of Oxford conferred the title of Doctor of Music. To this extraordinary man we are indebted for one of the most beautiful pavans ever written, *The Earl of Salesbury*.

These eminent names must not make us forget a little-known, imaginative pioneer, Nicholas Carlton, who wrote the apparently earliest keyboard duet "for two to play on one virginal or organ" and another virginal piece with the unprecedented key signature of four sharps.

It has been said that the players of the sixteenth century, and even those of the seventeenth, used a clumsy fingering in which the thumb and generally also the fourth and fifth fingers were left out. This is true as far as it goes. The front page of the *Parthenia* shows a player who obviously does without the last two fingers. But such index-middlefinger technique was probably confined to instruments with short keys which were touched on their front-edges with the tips of the longest fingers, thus excluding the other ones. Anyway, engravings of times before the *Parthenia* depict performers who avail themselves of all their fingers (plate XIV).

Much later, in 1753, Carl Philipp Emanuel Bach stated that

his father had "heard great men in his youth who did not use the thumb except when it was necessary for large stretches" but had himself raised the thumb "from its former idleness to the position of the principal finger" (quoted from the translation in Hans T. David and Arthur Mendel's *Bach Reader* page 254).

THE RECITATIVE was the true, revolutionary accomplishment of the time. Avoiding melodic organization in rhythm and form, giving—in principle—one note to each syllable of the text, and vaguely imitating the natural inflection and meter of ordinary speech, it rendered the sentence as a whole, hastened the words of minor importance, and thus became the ideal idiom for purely epic and dramatic episodes, which in their transitory character and rapid change of mood did not allow for the lyrical flow of melody proper.

Recitativo, however, had then a broader meaning than it had a hundred years later in operas, oratorios, and cantatas. The classics professor Giovanni Battista Doni, its petty, malicious, and arrogant herald, described it as any pleasant solo melody that allowed the words to be easily understood, on the stage as well as in church, in the prayer chapel, at home, or anywhere else. It could, he said, be adorned with grace notes which, although not likely to express emotion, please people of lesser taste and singers eager to display technique and knowledge.

The recitative had forerunners as far back as 1554 in Alfonso della Viola's pastoral play *Il Sacrificio* and, later, in one of the models of the *masque*, Baltasar de Beaujoyeux's *Ballet de la Reine*, that the court of Paris played in 1581 for a ducal wedding—the earliest ballet whose music is preserved. But, clumsy and stiff, these initial attempts at recitativic writing were still a far cry from the easily flowing recitatives that Italian masters wrote some twenty years later.

The novel style was born in Florence under circumstance unusual in the history of the arts. It was conceived by *camerata*, or circle of artists and scholars, who gathered in the house of a Florentine nobleman, Count Bardi, and discussed the problems of science, poetry, and the arts. Ottaviano Rinuccini, a famous poet, Galilei's father Vincenzo, and the composer Giacomino Peri were outstanding members. Giulio Caccini acknowledged that he owed a better understanding of music to their scholarly discussions than to all his counterpoint lessons.

Those who believe in instinct rather than in intelligence will have some difficulty in accepting erudite arguments as the source of a creative revolution. They should understand that the birth of a new style can be facilitated by the purely intellectual process of eliminating inhibitions, questioning prejudices, and bringing the blurred outlines of a new trend into focus. But they should understand also that the *camerata* alone did not invent the style to come. It was one cog in the complicated organization that ended the Renaissance and prepared for the Baroque in all the fields of human activity.

For the reaction of the *camerata* was no longer a part of the Renaissance. That it started from the ideals of Greek culture and used to refer to Plato and Aristotle was only natural in an educated circle. All centuries have firmly believed that they have found their own dreams come to life in Greek and Roman antiquity: Gluck and, a hundred years later, Wagner no less than Peri and Caccini, thought that they were recreating ancient tragedy. There is no trend in any period of history that humanists cannot legalize by a reference to classical antiquity, just as there is no way of thinking for which the preachers cannot find a corroborating Bible verse.

The road away from the Renaissance that the *camerata* opened led to emotionalism, individualism, illusionism, and the disintegration of music as an end in itself. It left behind the ideals of polyphony.

The official manifesto against counterpoint and the "moc

ern" music as a whole was Vincenzo Galilei's *Diálogo della musica antica e della moderna* of 1581. There the author scorns those boorish, idiotic musicians who do not believe in the wonders of Grecian music and who measure that perfect and scholarly art by the standards of their own confused ignorance. "It is meaningless and ridiculous how they do justice to the words of the text and depict them, as children would do, with dotted notes and syncopation (as if they had the hiccup) when the text speaks of a limping ox; they mimic drums and trumpets; to the words 'he descended to Pluto,' the singers grumble as if to scare the little ones; to 'he ascended to the stars,' they scream as if they had the colic; indeed, they have their ready-made symbols for crying, laughing, singing, shouting, clamoring, deceit, hard chains, harsh fetters, raw mountain, steep cliff, cruel beauty. Had Isocrates or any great orator stressed an individual word in a similar way, he would have been stopped by angry and laughing listeners."

Galilei's music, the first manifestation of the future, is lost. But we know its titles and, therewith, what he meant to express. In the first place, he composed the pathetic monologue, from the thirty-third canto of Dante's Hell, of the unfortunate Count Ugolino, who, starving in the tower of Pisa, watched his children also starve to death. Next, Galilei set to music the responsorial lamentations of Easter week, and in the third place, the lamentations of Jeremiah.

All three compositions were laments. And affliction remained the keynote for more than three generations. No delight in melancholy was the cause. At the bottom of these and all the following laments was the principal aim of Baroque art: to form a *stile rappresentativo*, as the musicians called it, and to create emotion in order to penetrate to the depths of human feeling. Music, in the words of Mersenne, should force its way into the listener's soul to possess and lead it whither the composer wishes. This was more than an empty phrase. Music went the way of the greatest spiritual power of the seventeenth century, the Catholic Church, which, in the times of

the Counterreformation, attempted to master the soul of man with all its means and weapons: with the propagandistic order of the Jesuits, burning stakes, a colorful service, and overwhelming architecture. And music went the way of all the arts of the time, to naturalism, indeed, to illusionism. It had its share in attacking the soul with irritation, flattery, and intoxication.

The way through the lachrymal glands was the shortest and safest; tragic emotions are surer to reach the hearts than merry ones. Thus we read in a diplomatic report of 1608 that, when Monteverdi's opera *Arianna* was being performed at the court of Mantua, "many" shed tears on hearing the heroine lament for Theseus (2000 Y), who had deserted her. Indeed, exactly the same sentimental outburst occurred in Rome about 1630 when the castrato Loreto Vittori sang Mazzocchi's Lament of St. Magdalen. Such reaction had hardly been reported in earlier days.

Even before the time of Galilei, Roland de Lassus and the German Leonhard Lechner had composed—the contritest of laments—the seven penitential psalms. William Byrd wrote *Psalmes, Sonets & Songs of Sadnes & Pietie* for five voice parts in 1588. In 1605, the lutanist John Dowland wrote *Lachrymae, or Seaven Teares, Figured in Seaven Passionate Pavans* for lute, viols, and violins, of which both Byrd and Farnaby made virginal versions. In 1613, one Angelo Patti printed a Lyrical Plaint of the Virgin Mary Over the Face of the Dead Christ; in 1623, the violinist Biagio Marini published *Le Lagrime d'Erminia*; and in 1655, the same master came out with *Lacrime di Davide*.

At least from 1640 on, laments were composed as independent dirges to the memory of some outstanding person. They were generally given the French title *tombeau*, or 'tomb,' a custom apparently inaugurated by the great lutanist Denis Gauthier, who, in 1640, wrote one for the organist Raquette. Most of them followed the form of some solemn dance, a pavan, as in Dowland's case, or an *allemande* (AS 8).

THE THOROUGHBASS. The musical revolution manifest in the rise of solo singing, of the recitative, and of the monody had to create the thoroughbass as a necessary substructure.

In the polyphonic style, the bass had been one among several voice parts, keeping mostly below the other parts, but at times ascending above the higher neighboring part and trespassing on tenor grounds when its natural progress imposed such a course. Indeed, on ending a phrase, it had rested for a few measures and allowed some other voice to be the lowest.

Against this polyphonic conception, the harmonic conception of a steady, permanent thoroughbass took shape. The movement quite naturally started with the key- and finger-board instruments, where the crossing of voice parts and their temporary interruption was indiscernable and therefore meaningless. As a consequence, the old conception of an individual bass among parts of equal rights was increasingly replaced by the new conception of a line connecting the actually lowest notes, whether or not they belonged to the same voice part. This bass, then, was no longer one of the voice parts, but an all-supporting *basso continuo*, or thoroughbass. Such an anti-polyphonic attitude would not have been possible, of course, had not the growing sense of simultaneous hearing weakened the purely polyphonic conception of independent voice parts.

Under a similar influence, the polyphonic weaving had been subjected more and more to a logical progress of the con- and dissonances that the simultaneous voice parts formed. It was only a confirmation of such development that the accompanying players, unable or unwilling to perform the exact polyphonic weaving, interpreted it as an interesting form of movement from chord to chord and confined themselves to performing these implied chords instead of the contrapuntal weaving.

The players did not care to write the harmonies out, how-

ever, nor did the composers. For the density and range of the chords depended on the nature of the instrument on which they were played and also on the acoustic conditions of the room of performance. Instead, the accompanists 'realized' the chords *prima vista* from the bare thoroughbass, to which only a few figures were added, above or below the notes, to indicate what chords should be improvised over them—3 for the third, 4 for the fourth, and so on, the 5 and the 8 generally being left out.

In this form, the figured bass or thoroughbass, realized on some organ, harpsichord, or lute, was an indispensable feature of all music until about 1760, whether it was instrumental or vocal, solo, chamber, or symphonic music. So important was this accompaniment that in all orchestral music the *maestro al cembalo* acted as the conductor.

It was not the ordinary lute, however, that served as a bass accompaniment. Besides the usual strings, the thoroughbass lute needed a set of longer strings for the bass proper. But since these additional strings could not be arranged on the fingerboard without overtaxing the possibilities of the player's left hand, they were given a second, higher pegbox, from which they ran down to the bridge beside the fingerboard as unstopped drones. The two main models were:

(1) The *chitarrone* (pron. k-), a man-size lute, the neck of which continued straight above the pegbox proper and ended in a second one.

(2) The *theorboe*, which had the second pegbox only a little higher and slightly to the bass side, the two boxes being connected by a piece of neck in the shape of a flat S.

England had, besides her lutes, three specific instruments which often appear in the titles of printed music:

(3) The *cittern*, with a flat back, a pear-shaped outline, and usually nine wire strings in five courses.

(4) The *pandora*, or *bandora*, with a flat back, a scalloped outline, and seven double or triple strings.

(5) The *orpharion*, or *orpheorion*, with a flat back, an un-

dulating outline, a slanted frontal stringholder, and eight double strings.

Illustrations of these five instruments, as well as of the ordinary lute, can be found in the author's *History of Musical Instruments* on pages 346, 371, and 373.

NOTATION in writing and print had not yet reached the modern stage. Bar-lines were rare, and the notes themselves still had, in general, the square and the diamond shapes of the mensural script. Once in a while, the bewildered reader meets the unwonted group of a stemless and a stemmed diamond, for which he finds no analogy in modern notation; it indicated a dotted semibreve *plus* a subsequent minim.

A much detested stumbling-block to modern score-readers is the (later so-called) *chiavette* (pron. kyahv-), or 'small clefs.' Bewildering from a modern viewpoint, it is an easy and logical form of script in the light of ancient practice. The following statements will explain its meaning and form.

(1) In a time in which a voice part hardly exceeded the range of a tenth and therefore could be easily written within the five lines of the staff, the use of ledger-lines was rare and dreaded as an unnatural, unwonted, and confusing expedient.

(2) When a voice part was slightly higher or lower than usual, it no longer coincided with the staff and required ledger-lines. The best way out was to accommodate the voice part on the staff and to change the ordinary pitch by shifting the clef accordingly upward or downward—just as we do today when we pass from the treble to the bass clef, and vice-versa in piano and French horn parts. Plainsong notation had shown the way.

(3) Since as a matter of course the higher or lower range of any individual voice part entailed an accordingly higher or lower range of each of the other voice parts of a polyphonic


piece, musical practice of the polyphonic era devised three principal sets of clefs to serve in keeping all the voice parts within the range of the staff, as shown on page 203.


This interpretation is confirmed and elucidated in Thomas Morley's *Plaine and Easie Introduction to Practicall Musicke* of 1597: all songs are "either in the high key or in the lowe key . . . but you must understand that those songs which are made for the high key be made for more life, the other in the low key with more gravetic and staidnesse." What Morley calls the low key is, however, the *chiave naturale*. The actual low *chiavette* were, according to him, used in men's ensembles only.

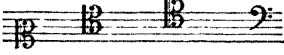
Key transposition has been thrown together, in a confusing way, with an entirely different change of key, which has very little to do with the 'high' and the 'low' key. Besides the written *chiavette*, which allowed doing without, or almost without, ledger-lines, an imagined *chiavetta* allowed the performer to transpose any piece upward or downward without a change in its written form. Suppose it seemed desirable to sing a certain piece a minor third lower than the composer had chosen to write it down. The altist, for example, could avail himself of the original notation, if he fancied the alto clef to be a tenor clef—that is, a C clef on the fourth, instead of the third, line of the staff. But he had to change the key signature, too. Otherwise, a C major phrase, for example, would become A minor, not A major. As a rule, performers seem to have been well able to make either change at first sight. But we also hear of the cheap expedient of glueing a scrap of paper with the new signature over the old one with a drop of wax.

The end of the sixteenth century witnessed the penultimate shift of time-values: the long, when still in use, came to approximate two modern wholenotes; the breve, one wholenote; the semibreve, a halfnote; the minim, a quarternote; the semi-minim, an eighthnote; the *fusa*, a sixteenthnote; and so on.

Polyphonic music was usually still written and printed in part-books. But something unprecedented happened in 1577;

High chiavette: 

Normal clefs: 

Low chiavette: 

or 

High clefs: 1. treble: 

2. mezzosoprano: 

3. alto: 

4. baryton: 

Normal clefs: 1. soprano: 

2. alto: 

3. tenor: 

4. bass: 

Low clefs: 1. mezzosoprano: 

2. tenor: 




3. baryton: 

4. counterbass: 

(Slight modifications would occur.)

the printer Angelo Gardano in Venice published Cypriano de Rore's madrigals *spartiti*, or, literally, de-parted in score-form with bar-lines.

Bar-lines, nevertheless, did not necessarily mean in the sixteenth and seventeenth centuries what they do in modern music. Quite to the contrary, they often dangerously mislead the modern performer. For they did not indicate what we today call a measure—beginning on a heavy accent and ending directly before the following heavy accent—but rather the rigid, unconcerned, metronomical down- and upbeat of the *tactus*, which, according to the conducting rules of the time, conveyed the regular time-units whether the player had to arrange them in groups of two, three, or four beats, whether in a down- or an upbeat rhythm (cf. page 140). Thus, the seeming duple-time between the ancient bar-lines could easily conceal an actual triple-time. For instance:

| | |
|---------------|---|
| Old notation: |  |
| New notation: |  |
| Or even: |  |

A final remark should touch upon the Spanish organ tablature, familiar from Cabezón's works and very different from the so-called German keyboard tablature. At first sight, it looks like a lute tablature. But its staff lines mean voice parts—two, three, or more—and the figures from 1 to 7, inscribed on the lines where they belong in the chordal or polyphonic texture of the piece, prescribe the notes of the *F* scale with the flatted or natural *B* according to the usual key signature.

READING: Gustave Reese, *Music in the Renaissance*, in preparation. Henry Coates, *Palestrina*, London, 1938. Charles van den Borren, *Orlande de Lassus*, Paris, 1920. Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke*, London, 1597; facsimile edition by the Shakespeare Association, London, 1937. Morrison C. Boyd, *Elizabethan Music and Musical Criticism*, Philadelphia, 1940. Charles van

den Borren, *The Sources of Keyboard Music in England*, London, 1914. Margaret H. Glyn, *About Elizabethan Virginal Music and its Composers*, London, 1924. Curt Sachs, *The History of Musical Instruments*, New York, 1940: Chapter 15. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1567.

LISTENING: AS 4, 12, 14, 25, 36, 47, 58, 104. 2000 Y 6, 8

13

THE AGE OF MONTEVERDI AND SCHÜTZ

1600-1630

THE STILE RAPPRESENTATIVO. Under the impact of a strong naturalism, the recitative had developed by 1600 into a rendition, not only of speech in general, but of all the passions, moods, and characters that speech expresses.

Indeed, the new monody, avoiding melody in the proper sense of the word, followed the natural inflection of speech in order to make the audience almost forget that the singers were singing. Humanism, to be sure, had emphasized the prevalence of the words a hundred years before, but, with all respect for a clear enunciation of the text, the polyphonic style of early humanistic days had, in Giulio Caccini's own words, "stretched out or on the contrary compressed the syllables for the sake of counterpoint and thus destroyed meter and words." With the elimination of polyphony around 1600, the composer was at last in a position to comply with humanistic claims without restriction. In this spirit, Giovanni Battista Doni said: "The real delight in hearing a singer derives from a clear understanding of the text." Father Marin Mersenne, the Frenchman, even went a step further: "A singer's performance should have the effect of a well-made speech." Indeed, Monteverdi wrote: "Speech should be master of music, not its servant," and Caccini, who in the Florentine *camerata* had been trained to quote from the Greeks, referred to Plato's radical creed that "music was in the first place speech and rhythm and only in the last

place tone." Logically, he claimed, in the preface to the *Nuove Musiche* of 1602, to have yielded to a noble disdain of melody, *una nobile sprezzatura del canto*.

The free addition of grace notes was no longer up to the singer; the composer would prescribe them where they belonged without destroying the character of the role in question.

As a consequence of such ideas, Giovanni Battista Doni suggested that composers model their monodies after the speaking style of skilled actors. From them they would learn where the pitch goes up and where it falls, where the tempo is slow and where more rapid, and which of the words should be stressed. The actors would show them how a prince addresses his vassal or some petitioner, and how a matron speaks differently from a young girl or a simple lad or a harlot.

It is hardly necessary to emphasize that so naturalistic and pregnant a recitative had little to do with the hasty, dry *parlando* of a hundred years later. Being *rappresentativo* and expressive, it was melodic enough in all its character and flexibility to demand the art of eminent singers and to captivate their interest. And the composer himself was often lured from the reserve of simple accompanying chords into a more elaborate and almost melodic accompaniment.

THE OPERA. The naturalness, tension, and emotion of the *stile rappresentativo* led inevitably to the form of the musical drama, or *dramma per musica*.

The earliest opera, Jacopo Peri's *Dafne*, is lost. It was written on a text of Ottavio Rinuccini (pron. reenootcheenee) and performed, as an outstanding local and social event, during the Carnival of 1597, in Jacopo Corsi's *palazzo* on the Arno in Florence, in the presence of Ferdinand, grand-duke of Tuscany.

But the year 1600 has left us no less than three complete scores of first importance. Two, from Florence, are operas in a narrower sense. One was by Peri, and one, by Giulio Caccini,

and both were on the same text, Rinuccini's *Euridice*, the drama of Orpheus. Jacopo Peri's score had been commissioned for the outstanding social and political event in the history of the Médici family: Maria's wedding with Henry IV, King of France. Caccini's was a rival score. In the forty years to come, all operas were intended to be given once or a few times in palaces at princely celebrations, and then to be put away for good.

In the same year, 1600, a Roman oratory congregation, Santa Maria in Vallicella (which San Filippo dei Neri had founded) performed a spiritual drama, *La rappresentazione di anima e di corpo* ('The play of the Soul and the Body'), on a text of Laura Guidiccioni with the music of Emilio dei Cavalieri (d. 1602). As in the moralities of the fourteenth and fifteenth centuries, its *dramatis personae* were allegories or abstract conceptions—Time, the World, Life, the Intellect, the Body—and its attitude was strongly didactic and edifying rather than dramatic. And yet, its music adopted the modern dramatic *stile recitativo e rappresentativo*.

The three scores of 1600, their successors in the first third of the century, and doubtless also the lost *Dafne* of 1597, consisted of an endless recitativic melody over a thoroughbass, interrupted by a few melodic songs and choruses and ending in a short ballet. The orchestra, aligned on the stage behind the wings, not in a pit in front, 'realized' the figured bass. As we learn from a composer of the time, Agostino Agazzari (1607), every member of an operatic orchestra was expected to know enough counterpoint to improvise freely upon the figured bass—evidently, the sound was by no means as meager as the sketchy two-staff scores suggest. Agazzari himself had contributed the first of the operas after 1600, the school-drama *Eumelio* (1606).

More important was a second composition of Rinuccini's *Dafne*, written for the court of Mantua by the chapel master of San Lorenzo in Florence, Marco da Gagliano, and performed in 1608. Its lengthy preface shows how close the early

opera stood to the ideologies of Gluck and Wagner. In an opera, says Gagliano, "the noblest treats unite: poetic invention, drama and thought, style, sweetness of rhyme, and musical art, concerts of voices and instruments, exquisite singing, nimble dancing and gesture, and even painting, both in the wings and in the costumes." Such conception is, after all, nothing else than the Wagnerian ideal of a *Gesamt-Kunstwerk*—a work embracing all the arts. Gagliano's preface even exhorts the singer to synchronize strictly the steps and gestures and musical beats, and gives him directions to the last details of performance—once more, just as Wagner did in 1852 in a pamphlet on Staging the Flying Dutchman.

MANTUA, homestead of Gagliano's *Dafne*, had shortly before seen the birth of the two operas in which the early court opera reached a peak: Monteverdi's *Orfeo* (1607) and *Arianna* (1608), each written with an almost supernatural effort in the darkest hours of the master's life and in a profoundly human spirit. Years later, the master refused a few other mythological subjects suggested to him with the remarkable words: "A monster, a wind, cannot move. Arianna makes me cry, and Orpheus makes me pray; but what place would music have in such a piece?"

Claudio Monteverdi's dates are told in one short sentence: Baptized on May 15, 1567, in Cremona, Lombardy, he became a viol player and singer in 1590 and a conductor in 1601, both at the ducal court of Mantua, went to Venice as the director of music at St. Mark's in 1613, and died there thirty years later, on November 29, 1643.

His printed music, without including posthumous editions, spans no less than sixty of the seventy-seven years of his life. It begins with spiritual madrigals in 1583 and ends with the opera *L'incoronazione di Poppea* in 1642. The most remarkable of his numerous operas are *Orfeo* (1607), *Arianna* (1608, lost ex-

cept for the famous lament), *Il ritorno d'Ulisse in patria* (probably 1630, but remodeled in 1641), and, as the last, the just mentioned Coronation of Poppea (1642). He also wrote seven books of madrigals, *canzonette*, a ballet called *Il ballo delle ingrate* (1608), several *intermedi*, or *intermezzi*, to be given between the acts of spoken dramas, and, in addition, *Masses*, *motets*, *psalms*, *litanies*, and a kind of oratorio, *Il combattimento di Tancredi e Clorinda*, on a subject of Tasso (1624), which has wrongly been claimed to be the earliest evidence of the violin *tremolo*.

Quite a number of these works have been reprinted in recent years, complete or abridged, and, among them, the *Orfeo* several times. Francesco Malipiero even endeavored to edit Monteverdi's Complete Works.

Monteverdi's position in history is uncontested. As one of the greatest geniuses of all times, inexhaustible in melodic, rhythmic, harmonic, and orchestral resources, he was alive and open-minded enough to follow, nay, to lead the changing trends of three successive generations.

Up to the age of forty, writing *canzonette* and madrigals only, he lived in the sphere of aristocratic chamber music in either one of the two aspects that it presented in the final years of the sixteenth century. On the one hand, he continued the evolution of the madrigal in an ever growing sophistication, which necessarily led from an intimate entertainment of cultivated amateurs to a concert form for skilled professionals. On the other hand, he had his share in the modish counter-thrust against sophisticated madrigals by writing popular, light-footed *canzonette* in simple settings with catchy refrains and unsentimental words.

At forty, Monteverdi wholeheartedly joined the revolutionary movement of the rising Baroque, which, disregarding intimate chamber music, focused on the stage. Ten years before, the opera had been created and, with it, the *stile rappresentativo*, which, ignoring polyphony, modeled melody after the characteristic inflections of natural speech and filled it with a

force capable of moving the audience that older times had not considered. Monteverdi at once outdid the pioneers. Where Peri and Caccini had lost themselves in dry and tedious recitatives, he, the leading master of the madrigal, knew how to give both force and beauty to such music and to express emotion in rare and daring modulations, and he, the master from the color-drunk Northeast of Italy—which had begotten Giorgione, Titian, and the Veronese—also knew the art of creating an emotional atmosphere by skillfully mixing the timbres of instruments. Peri's and Caccini's earlier operas had been precursors and have now hardly more than historical interest, but Monteverdi's *Orfeo* of 1607 has great, eternal music.

NOT EVEN MONTEVERDI'S genius was able to give the musical drama an international, supranational significance. Spain, to be sure, produced a courtly opera of her own, called *zarzuela* after a royal country-seat near Madrid. But it had spoken dialogues—the recitative was not imported.

England, France, and Germany showed little interest in the new form of courtly musico-dramatic entertainment.

The English, averse to the opera proper and more so to the recitativic style, which did not suit the monosyllables and soundless vowels of their language, instead developed the age-old masque (or mask) to a peak. This was a sumptuous courtly play of a mythological or allegorical character with spoken, vocal, and instrumental sections and with acting and dancing, partly after French and Italian models. It gave preference to the vivid forms of *ayres* and *balletti*. Of personalities, one name connected with the masque in the time of James I and Charles I is particularly well known: Ben Jonson, the dramatist (d. 1637), who, for twenty-six years, had the monopoly of writing the masques for the court. Among composers we find Alfonso Ferrabosco, and among the artists responsible for

machinery, costumes, and scenery, the eminent architect Inigo Jones (1572-1651). The performers were aristocratic amateurs.

THE URGE OF THE TIME to convey emotion, so unmistakably apparent in the monodic *stile rappresentativo*, also reshaped the older madrigal and brought to a new height of sophistication and technical difficulty what had begun as a noble parlor entertainment, both in Italy and in England. Luca Marenzio was mentioned in the preceding chapter as the initiator of this development. In 1588 William Byrd gave the earliest evidence of an unprepared dominant seventh chord—before Monteverdi, who has generally been credited with this innovation. Monteverdi, however, continued and crowned Marenzio's work; Thomas Weelkes (d. 1623), like Gesualdo, delighted in novel harmonic clashes and shifts in his five sets of madrigals; and Gesualdo himself not only ended the over-refined period of the madrigal but brought the madrigal itself to an end.

Don Carlo Gesualdo, Prince of Venosa in South Italy, was born about 1560 and grew up as an almost fanatic lover of music and the center of a brilliant circle of prominent artists and scholars. A terrific family catastrophe ended the happy years of his life in 1590: true to the pattern of the age, he caused the brutal deaths of his beautiful wife, her lover, and a child that he suspected to be not his, and fled to the court of the Este in Ferrara. He died in 1614 at Naples.

Although he was an excellent player of the bass-lute (*chittarrone* or *theorboe*) and other instruments, he published madrigals exclusively—madrigals rooted in the latest Marenzio-Monteverdi style, but boldly advancing beyond the innovations of these men. True, his polyphony, fluent and sophisticated, followed tradition. But it ceded a good deal of its former dominating position to a harmonic style in which the simplest triads were in rivalry with unheard-of inversions of altered

seventh chords in shifts and modulations of the weirdest kind, with appoggiaturas, changing notes, interrupted cadences, harshly dissonant entries, and chromatic progressions, which are always fascinating and often of irresistible beauty.

Contemporaries admired these madrigals as the inspirations of a genius, just as much as the critics of the nineteenth century scolded them as the amateurish experiments of "a cavalier stumbling about in the maze of modulation." Today, we know that he was one of the great masters and one of the boldest pioneers.

True, his modulation was 'illogical'; but only from the viewpoint of Rameau's harmonic system. It was not illogical as a floating harmony without a supporting thoroughbass. True, also, that Gesualdo did not strictly confine his unwonted chromatics to underscoring the Tristic pangs of death in his love songs, with their ever recurring *io moro's* (I die), or to other emotional climaxes. No doubt, Gesualdo overdid chromatics from sheer delight in eccentricity and abnormalcy. But, in this delight, he reflected one of the traits of the Baroque age—the one that popular terminology denotes as 'baroque.'

How these late madrigals of the seventeenth century were performed is largely unknown. But one important point is sure: the freedom of their tempo. Girólamo Frescobaldi (1583-1643), the greatest organist of his time, whose performances at St. Peter's in Rome were attended by tens of thousands of enthusiasts, is our witness. In 1614, the year of Gesualdo's death, Frescobaldi prefaced a collection of his own *Toccate e Partite* for harpsichord with the direction to the players not to stick to one persistent tempo, but, on the contrary, to change it within the same piece according to the changing character of the music. The players, he adds, should feel in this as free as do the singers of modern madrigals.

Already, three years earlier, Adriano Banchieri had prescribed in the second edition of *L'órgano suonarino* six different tempo marks: *adagio*, *allegro*, *veloce*, *presto*, *più presto*, *prestissimo*.

The expressiveness of the modern style led to two further developments. In the first place, did the generation of 1600 depart from the earlier practice of keeping a musical piece in the same intensity throughout? Contemporaries said with pride that, while yesterday's singers did not know about forte and piano, the singers of today not only have a way to inflate and deflate the individual note [although, to be sure, not groups of notes or phrases], but they also alternate between piano and forte.

At least from the time of Lassus on, musicians and listeners had occasionally delighted in echo effects, with a whole phrase or the end of a phrase repeated in *piano*. But though the echo as such was retained up to the times of Mozart, the later sixteenth century developed the contrast of intensities on a broader basis.

Indeed, Giovanni Gabrieli wrote in 1597 a *sonata pian e forte* for two groups of instruments (AS 25) with the play of light and shade in a continual, carefully marked alternation of forte and piano.

But this sonata is remarkable also for another reason. Orchestration in a modern sense had hardly existed before: the selection of instruments had depended little or not at all upon the emotional character of a composition, and when subsequent pieces in a program were left to different groups of instruments, the idea was pleasurable change and contrast rather than significant meaning. As late as 1600, Emilio dei Cavalieri gave no special instructions in his *Rappresentazione di anima e di corpo*, but expected the conductor to make an appropriate selection and scoring of instruments, just as most of our organ music leaves registration to the performing organist, in order not to interfere with the special conditions of his church and his instrument.

It was in an entirely new spirit that Gabrieli's *sonata pian e forte* expressly prescribed a zink or cornetto and three trombones in the first, and a viola and three trombones in the darker, second chorus. The art of orchestration had been born.

THE INSTRUMENTS. The rise of orchestration was closely connected with a thorough change in instruments.

In the sixteenth century, instruments had been expected to provide a number of different, sharply contrasting colors; and the limited range that the voice parts had in the polyphonic style and their limited emotional quality had given a chance even to those instruments of the woodwind family which, due to wind-caps concealing the reeds and precluding any coöperation of the human lips, were unable to overblow into the higher octaves or to render shades of personal feeling.

The new monodic *stile rappresentativo*, on the contrary, needed instruments with the extensive range and the expressive qualities of singers. As a consequence, the rigid shawms, *sordoni*, *doppioni*, rankets, cromornes, *bassanelli*, *schryari*, and what not, disappeared from the scene (except for a few decades of continued life in German bands), and yielded their place to the more flexible wind instruments, such as flutes, oboes, bassoons, and, at the beginning of the century, the *zinken* or *cornetti* (cf. page 191).

Again, as in most dynamic times, attention was given to instruments of a low tessitura. In 1614, a musician in Berlin, Hans Schreiber, constructed a double-bass trombone and, shortly later, a double-bassoon.

Altogether, the seventeenth century—and Italy in particular—shifted the accent from the wind instruments to the stringed instruments. It was at that time that the manufacture of Italian violins had its first great period. Gásparo da Salò and Giovanni Paolo Maggini were working in Brescia, Lombardy, and Andrea Amati, then still alive, had founded the all-dominating school of Cremona near Brescia. The other nations did not yet participate in the manufacture of violins.

ISTRUMENTAL MUSIC. Only a few years after the decisive victory of vocal monody, instrumental music, too, began to adopt the *stile rappresentativo*. A first move in the new direction was the book of *Sintonie et Galliarde* (1607) by Salomone Rossi Ebreo (c. 1565-c. 1628), the 'Jew,' a violinist in the service of the Duke Gonzaga at Mantua and the celebrated composer of the Hebrew Psalms and the Song of Songs in polyphonic settings.

The term *sonata*, used in Rossi's third book of 1623, denoted 'trio' sonatas, that is, pieces for two melody instruments and a third instrument for the thoroughbass. The first book still left the choice between violins and *zinken* or *cornetti* for the melody parts; the later books were definitely meant for violins and nothing else. The figured bass was realized on a harpsichord or a *chitarrone*, if possible with the coöperation of a bowed-bass—an instrument halfway between a 'cello and a doublebass, but not a gamba. These trio sonatas were actual monodies full of *affetto* and *cantabile*, and despite a good deal of imitative counterpoint, the two melodic parts often alternated at so long a distance that they formed consecutive solos.

This form, characteristic of the Baroque age down to the times of Handel and Bach, was brought to an early climax in the violin sonatas of the Brescian violonist Biagio Marini (c. 1600[?]-c. 1655), whose earliest work, in 1617, had the timely title *Affetti musicali*, and contained, among sonatas for two violins, the oldest one for only one violin and accompaniment.

Incidentally, Marini's publication was called his *Opus 1*. Musical work-numbers date from that generation, although they were nothing less than general in the seventeenth and eighteenth centuries.

The common tendency in all the arts of the Baroque—to give their works a unity of matchless strength—led, in Rossi's

instrumental monodies as well as in Monteverdi's vocal monodies (AS 21), to a remarkable emphasis on variation in its two forms, either in ever new configurations over a 'ground,' or *estinato*, or else as a set of paraphrases on the same melodic pattern (cf. page 175). Despite a general confusion of terms, the *ostinato* variation is generally given the name *passacaglia*, and the paraphrase on a steady succession of chords is called *chaconne*. As a rule, both have the triple-time in common. It must be stated, however, that the seventeenth century hardly knew of such classifications and used the two terms without any apparent discrimination. And the reader should also be warned that the French composers of the time allowed themselves to give either title to entirely different forms.

While the violinists were developing instrumental monodies, the organists clung to forms inherited from the preceding century. Girólamo Frescobaldi, already quoted, wrote *partite*, in their original meaning of variations, and *toccate* in a peculiar style, from which the polyphonic episodes, as well as the bravado passages, had disappeared. AS 4 presents a beautiful *toccata* in a broad harmonic weaving, to be played at Mass before the host is offered.

A third form suitable for organ was the *ricercare*, which the preceding chapters have discussed. At the beginning of the century, it reached a unification that makes it almost a fugue (AS 4). The master mainly responsible for this evolution was Andrea's nephew Giovanni Gabrieli (1557-1612), who, from 1575 to 1579, served the court of Munich under Lasso and succeeded Claudio Mérulo to the first organ at St. Mark's in Venice in 1586.

One part of his fame is due to the many-sided volume of religious and secular music that he left for the organ, for orchestral ensembles (AS 25), and for voices (2000 Y). But another, and perhaps still more important, part of his fame was pedagogical. Like his uncle Andrea, he was the greatest teacher of world renown to two generations of young composers. Among those whom the reputation of these two educa-

tors attracted were Hassler, Sweelinck, and Heinrich Schütz.

Hans Leo Hassler (1564-1612), fundamentally an organist, studied with Andrea Gabrieli in Venice, but spent most of his life in South Germany and attained an unusual reputation, culminating in the nobility that Emperor Rudolf II conferred upon him. Many of his compositions merged the Venetian style with German tradition. A curious example of these not-always-convincing mixtures can be found in a piece recorded in 2000 Y, which sets a harmless, amorous madrigal text to the pompous style of Venetian state motets for two choruses. Truer to pattern are his typically German works: chorale-motets (AS 72) and such *Lieder* as *Mein G'müt ist mir verwirret von einer Jungfrau zart* (My mind is all confused about a tender maid), which later became one of the greatest Lutheran chorales with the texts *O Haupt voll Blut und Wunden* and *Wenn ich einmal muss scheiden*.

MICHAEL PRAETORIUS (1571-1621), although not a direct pupil of the Gabrieli, belongs in this group, too. For no less than Hassler did this great *Kapellmeister* of Brunswick graft the modern Venetian style upon his German heritage. A considerable part of his enormous number of compositions are polychoral, and many have the abrupt, exciting change of tempo and rhythm and the restless alternation of a chorus, solo singers, and instruments that Giovanni Gabrieli cherished so much. A particularly striking example is recorded on AS 72.

To the modern world, however, he is much more important as the author of the most outstanding and comprehensive work on the music of his time: the *Syntagma musicum*, printed from 1615 to 1620 in three volumes, of which the second and the third are easily accessible in modern reprints. The first volume deals with the theory of music, especially counterpoint; the second is a complete manual of all the instruments of the time,

with their ranges and their effigies in woodcuts carefully drawn to scale; and the third contains a detailed practice of music with all the forms of solo, choral, polychoral, and orchestral performance.

The name Praetorius is particularly familiar to the musicians of our time because, as the last chapter of this book will show, a number of modern organ builders have revived the German type of organ of about 1600 that Praetorius analyzes thoroughly in the second volume of his *Syntagma*. It has contrasting, hard, unbroken timbres with a special predilection for poignant, jarring reeds and four-foot stops (*cf.* page 235), which give it a lighter, more festive coloring than has the later organ.

An important Dutch disciple of Andrea Gabrieli was Jan Pieterszoon Sweelinck (1562-1621), organist at the Old Church in Amsterdam. He wrote *chansons*, reformed psalms, and *cantiones sacrae*, that is, motets (his Christmas motet *Hodie hodie* is a favorite of our choral societies). But his incomparable eminence is based on gigantic fugues for the organ, the earliest—in the proper sense—ever written and, besides those of Bach, the peak of the form. A whole generation of German organists wandered to Amsterdam to be his pupils, among them Samuel Scheidt from Saxony, who will be discussed anon.

SAXONY can claim a section of her own in this short survey—most German composers have hailed from that Germano-Slavonian borderland. Within two years, she gave birth to three composers whom contemporaries lovingly called their three great Esses: Schütz, Schein, Scheidt.

Heinrich Schütz, the greatest of them, was born on Oct. 8, 1585, a hundred years before Handel and Bach. Having graduated from the *Gymnasium*, he was just entering the university of Marburg to study law (1609), when his generous landgrave (of Hesse-Cassel) sent him to Venice to be Giovanni Gabrieli's

pupil. Back in Germany after three years, and once more set to study law, he became an organist at the Court of Hesse-Cassel (1613), only to be lent to the Electoral Court of Dresden in the following year. There he was made *Kapellmeister* in 1617 and lived in this high position—although with long interruptions that the miseries of the Thirty Years War forced upon him—until he died, eighty-seven years old, on November 6, 1672.

The complete works of Schütz were edited by Dr. Philipp Spitta from 1885 to 1894 in sixteen partly volumes. There, the reader finds Passions, oratorios, psalms, motets. He also would find the earliest German opera, *Daphne*, written in 1627 for the court at Torgau on the Elbe on a libretto by Heinrich Opitz after Rinuccini's thirty-year old text; and would even find a ballet on another subject dear to the pioneers of the Italian opera, *Orpheus und Eurydice* (1638), were the two scores preserved. But he does not, and could not, find any instrumental music. Schütz wrote neither dances, nor chamber music, nor keyboard pieces. Even his *Symphoniae Sacrae* and *Geistliche Concerte* were, despite their misleading titles, written for voices with instrumental accompaniment.

This vocal style had a maximum of concentration and an unparalleled expressiveness. In the modern *stile recitativo e rappresentativo* of Italy, Schütz found the proper medium to stress the meaning, grandeur, and intensity of the words of God in a truly Protestant spirit, although he had to shear the style of its native theatricality. On the other hand, he often wove the powerful, festive polychoral style of Venice upon the sober web of traditional German polyphony.

Much as he absorbed the modern style of Italy, he found, in some of his greatest works, the way far back into a severe and vigorous archaism. In three (not four) Passions after the German versions of Luke, John, and Matthew (1665-1666), the octogenarian did completely without any instrument and, while a few dramatic choruses represented the people and the disciples, he reverted in the narration and the words of

Jesus and other single persons to the austere psalmodic style of the Gregorian chant.

The reader finds recorded examples of Schütz's compositions in AS 28, Spiritual Concerts (1636-1639), or psalms for one or two voices with organ; in AS 60, a funeral music for chorus *a cappella*; in 2000 Y 19, the 111th Psalm for chorus *a cappella*. Other outstanding works are the Resurrection of Christ (1623) and a Christmas Oratorio (1664).

Johann Hermann Schein (1586-1630), from 1616 one of Bach's predecessors as the cantor at St. Thomas' in Leipzig, gave his best in polyphonic songs and in suites of dances. Their titles are not quite to the taste of our time. His earliest collection of secular songs, in 1609, was a *Venus-Kränzlein, mit allerley lieblichen vnd schönen Blumen gezieret vnd gewunden* (Little Venus garland, decorated and made with sundry lovely and beautiful flowers), and a later one, of 1621, *Musica boscarreccia, Wald Liederlein* (Little wood songs). The last of these secular collections, printed in 1626, is a *Studenten-Schmauss*, or Students' Banquet, for five voice parts and testifies to the role that German university students have played in the history of the German *Lied*.

The third of the three great Esses was Samuel Scheidt (1587-1654), disciple of Sweelinck and organist at St. Moritz's in Halle, Saxony. He, too, wrote part-songs in the older, pre-Italian and pre-monodic style. "I am astonished at the foolish music written in these times," one of his letters reads (1651). "It is false and wrong and no longer does anyone pay attention to what our beloved old masters wrote about composition. It certainly must be a remarkably elevated art when a pile of consonances are thrown together any which way. I remain faithful to the pure old composition and pure rules" (quoted from Norman and Shrifte, *Letters of composers*, New York 1946, page 17).

Scheidt's principal, widely influential work was the *Tabulatura Nova* of 1624, a weighty collection of organ music which (the earliest one to do so) established the contrapuntal art

of paraphrasing the Protestant chorale melodies on the organ—an art that, via the Nürnberger Johann Pachelbel (1653-1706) and Georg Böhm from Thuringia (1661-1733), reached a climax a hundred years later in Johann Sebastian Bach's chorale-preludes. AS 10 has recorded one of Scheidt's and one of Pachelbel's paraphrases.

THE WORLD OF SCHÜTZ, Schein, and Scheidt can hardly be thought of without the specifically German and Netherlandish municipal bands. Descendants of medieval nomadic jugglers and minstrels who had settled in towns as respectable burghers, these bands were appointed and underpaid by the municipal council and squeezed into the rigid social forms of medieval craftsmen's guilds. As a regular artisan, the master, or *Stadtpfeifer*, kept a number of *Gesellen*, or assistants—hardly ever more than four—and several apprentices. The little band, as a rule without the apprentices, played at all celebrations of the municipality, of the guilds and fraternities, and of the well-to-do families, on whatever instruments were required for the occasion—strings or woods, or brasses (*pl. XV*)—indoors or outdoors, down from the pipers' gallery in the city hall or from the tower (*cf. AS 2*), in the open market square, at processions and dances, at weddings and funerals.

The *Stadtpfeifer* played chorales—three times a day from the tower—and folksongs, but above all dances, solemn or lively (*pl. XV*). Such dances could be performed individually, one at a time. But it is more important, both from an artistic and a historical viewpoint, that the *Stadtpfeifer* took possession of the old idea of uniting several dances in some significant order and shifted such *suites*, as they called them, to the center of instrumental music. Our symphonies are their scions and acknowledge this parentage in their minuets and scherzos.

Schein and Scheidt played a momentous role in the early his-

tory of the suite. In 1617, the former master printed suites of pavans, galliards, courantes, allemandes, and triplas, or *Nachtänze*, in triple time (AS 57), under the title *Banchetto musicale*, or Musical Banquet, each of the five dances within a suite having not only the same key but also the same melodic theme. And Scheidt came out with similar sets in 1621 (cf. also the two suites of Melchior Franck and Valentin Haussmann from the early years of the century in 2000 Y).

READING: Manfred Bukofzer, *Music in the Baroque*, New York, 1947. Donald Jay Grout, *A Short History of Opera*, New York, 1947. Henry Prunières, *Monteverdi; his Life and Work*, New York, 1926. Cecil Gray and Philip Heseltine, *Carlo Gesualdo Prince of Venosa, Composer and Murderer*, London, 1926. Curt Sachs, *History of Musical Instruments*, New York, 1940; Chapter 17. Michael Praetorius, *Syntagma Musicum*, Vol. II, ed. Robert Eitner, Berlin, 1884, and facsimile Kassel, 1929; Vol. III, ed. Eduard Bernoulli, Leipzig, 1916. Charles van den Borren, *Les Origines de la Musique de Clavier dans les Pays-Bas jusque vers 1630*, Bruxelles, 1914. Hans Joachim Moser, *Heinrich Schütz, sein Leben und Werk*, Kassel, 1936. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1600.

LISTENING: AS 4, 10, 21, 25, 28, 57, 60, 72, 79. 2000 Y 7-10

14

THE AGE OF CARISSIMI

1630-1670

THE OPERA. From the 1620's on, Italy, the land of form, experienced a mild classical reaction both in architecture and in painting. Music did not lag behind them. In 1626 the preface to Doménico Mazzocchi's opera *La Catena d'Adone* (The Chain of Adonis) spoke for the first time of the *tedio del recitativo*, the tedium of the recitative. The enthusiasm with which the modern musical language had been received a generation before was gone.

The changing attitude soon left its stamp on the scores. The melodic qualities of the recitative could not be much enhanced without jeopardizing its speech-like qualities, and thus a splitting into two opposite forms was the natural way out. Melodic singing consolidated more and more in the well-wrought form of the *aria*, and recitativic singing became an ever quicker *parlando* without melodic ambitions.

The first chapter of operatic history had closed for good when Stéfano Landi, a papal singer, performed his *Sant' Alessio* in 1634. This half-religious opera kept equally aloof from the mythological subjects of the Florentine and Mantuan operas and from the pallid allegories of the earlier religious stage-works. Rather, it described the fate of a Roman of about A.D. 400, who forsook the opulent house of his father and after many years of Christian pilgrimage returned unknown to live under the stairs of his paternal mansion as a humble beggar.

The score had wholly novel traits: melodious da capo arias, in which the first part was, after a contrasting second part, repeated "from the beginning"; two actual overtures before the first and second acts, in the later form with changing rhythms and tempi in several movements; a castrato who, being gelded, sang a woman's soprano with the powerful resonance of a man's chest and added to the sensuous tonal beauty of sound at the cost of convincing naturalism; and a number of comic scenes and characters to provide the contrast—so dear to classical ages—with the serious, uplifting plot of the drama.

Claudio Monteverdi was once more in the modern camp. He, too, turned his back on the endless flow of recitatives and on the strict one-way progress of a drama in which no interrupting episodes allowed for contrasts. And he left the vagueness of subjects from myth and legend and resented the previous prevalence of drama over music.

His last opera, *The Coronation of Poppea* (1642; reprinted in 1931 in Volume 13 of Malipiero's edition), was still predominantly recitativic, yet it had parted from the ideals of *Orfeo*. The subject came from Roman history as the typical realm of classical operas, and a couple of *servi ridiculi*, or comic servants, provided the customary contrast. The music often broke away into solid forms, like *ariosi*, duos, and even a *terzetto*; the harmonies were very simple; and the melodies, far from the chromaticisms of Monteverdi's early years, were mainly diatonic and even triadic. The master had re-established the supremacy of music.

Master and leader in three generations, Monteverdi was a symbol of the re-awakening Italian music after the Renaissance and its Netherlandish domination. But more than a symbol, he was one of the greatest masters of all times and, to us, probably the most 'modern' of those before Bach.

Five years earlier than *The Coronation of Poppea*, the biggest event in the history of the opera had occurred: in 1637 the first public opera house had been opened in the San Cassiano parish in Venice. The opera was no longer the ex-

clusive property of courts, which performed a score for some dynastic celebration once and then put it away for good. It was now accessible to almost everybody who paid for his entrance ticket, and it was repeated as often as there was any demand.

From that decisive event we date the Venetian opera, which, after Monteverdi's last works, culminated in the scores of Cavalli and Cesti.

Francesco Cavalli (1602-1676) was successively a singer, organist, and chapel master at St. Mark's in Venice. Besides religious music, he wrote no less than forty-two operas, as a dignified heir to Monteverdi, and among them a much admired Giasone (1649), which has been partly reprinted by Robert Eitner.

Marcantonio Cesti was younger by half a generation. Born at Arezzo in 1618, he led the typical life of a seventeenth century conductor. *Maestro di capella* in a Florentine church in 1646, singer in the Sistine Chapel from 1659 to 1662, he finally held the position of a vice-director of music at the Imperial Court of Vienna from 1666 to his death in 1669. Excepting a single early opera, all his dramatic works were written in the sixties. One of them—Il Pomo d'Oro (The Golden Apple), 1667—composed for the court of Vienna, has been reprinted in the *Denkmäler der Tonkunst in Oesterreich*. AS 82 records an aria from this score.

The Venetian opera was in many respects much more classical than the early Florentine, Mantuan, and Roman operas had been. The typically classical longing for sharply outlined forms led to a distinct separation of recitatives and arias, to a liking for clear-cut folksongs, and to a re-awakening, genuinely Italian delight in beautiful singing. But it also led the declivitous way to a more elaborate staging and to a continual contrast of dignified and vulgar persons, of serious and comic episodes, and of commonplace plots and counterplots, which often threatened to strangle the Venetian opera in an inextricable ravel.

To add to this ravel, it became more and more customary to interweave, act by act, a comic opera, or *intermezzo*, with the principal, serious one. Although this confusing practice was continued up to the eighteenth century, in 1639 Venice gave birth to the earliest *opera buffa* in its own right, Marazzoli's *Chi soffre speri* (Who suffers may hope).

ORATORIO AND CANTATA. In the age of the Venetian opera, and as a balancing factor against its worldliness, the Italians created the semidramatic, religious *oratorio*, which generally stressed the epic and lyrical sides of events, gave a preponderant role to the chorus—which the Venetian opera was neglecting—and suppressed the dialogue almost completely. Its origins can be traced back to the tropes, liturgical dramas, and mystery plays of the Middle Ages, but its immediate predecessor was the popular service that San Filippo dei Neri had instituted around the middle of the sixteenth century in an oratory, or prayer chapel, over the church of San Girólamo in Rome, “in order,” as a contemporary says, “to attract the faithful and to entertain them with spiritual profit in those hours of the night which in the fall and the winter are the most dangerous, above all for youngsters.”

In 1639, a French violist, André Maugars, attended oratorical performances in the Congregation of the Holy Cross in Rome. “It consists of the noblest gentlemen of Rome,” he reports, “who are able to convene the choicest that Italy owns; and indeed, the outstanding musicians care to gather there, and the proudest composers deem it a privilege to have there performed the best they produce.

“The church is smaller than the *Sainte Chapelle* in Paris. It has, at the end, a platform with a middle-sized organ well suited for voices. Two other stages with excellent instrumental ensembles are placed on either side of the nave. To begin with,

the voices sang a psalm in motet form, and the players followed with a beautiful symphony. Thereupon they sang some story from the Old Testament in the form of a dialogue: Susanna, Judith and Holofernes, David and Goliath. Each singer represented one personage of the tale and rendered the meaning of the words with perfect skill. After some famous preacher had delivered a sermon, the music recited the Gospel of the day, such as the story of the Samaritan woman, the wedding at Cana, Lazar, Magdalen, or the Passion of the Lord."

Stéfano Landi and Doménico Mazzocchi (pron. mat-zóckee), each a dramatic composer, had begun to graft these devotional forms upon the tree of the opera. But a greater man, with lyrical leanings, interfered and brought the theatrical development to a decisive stop. He was Giácomo Carissimi (1605-1674), a church organist and for some thirty years the chapel master at Sant'Apollinare in Rome. Doing away with action, costumes, and scenery, he established the later form of the oratorio.

Carissimi's oratorios are not exactly what the reader, with Handel's gigantic works in mind, would imagine. His twelve oratorios on texts from the Old Testament—among them *Jephthe*, *Judicium Salomonis*, and *Baltazar* (that is, Belshazzar)—last only fifteen or twenty minutes each. Since there was no visible action, a narrator—*históricus* or *testo*—related the happenings. As a rule, he was a soloist, but sometimes two soloists sang the *testo* in a canonic duet, or a whole ensemble sang it, or even the chorus itself. The *dramatis personae*—Jephthe and his daughter, King Solomon, or Baltazar—sang recitatives, not arias. But the main role was given to the chorus, which, in vigorous, hammering, metrical chords with little polyphony, played the "ideal spectator" that it had been in the tragedy of the Greeks. Instrumental music appeared, if at all, in the forms of short *sinfonie* and *ritornelli* without prescribed orchestration. Altogether, Carissimi's style was very simple, with resting basses and rudimentary harmonies, such as be-

fitted a devotional form of art intended to be popular rather than refined or even sophisticated.

The *cantata*, a smaller, lyrical sister of the oratorio, slowly emerged in the 1620's as a third form of monodic singing. The name appeared first in Alessandro Grandi's *Cantate a voce sola* of 1620, which were monodic songs in stanzas, each stanza being a variation over the same 'strophic' bass or lengthy 'ground' spun out all through the stanza. Once more it was Carissimi who led the older cantata to a peak and established its standard form of two or more contrasting arias with their recitatives. There was, however, no chorus such as later in Bach's and other German, Protestant church cantatas.

THE POLYCHORAL STYLE. St. Peter's Church in Rome, which had been planned as an all round, symmetrical structure fifty years before, was given a long nave in the twenty years from 1606 to 1626 and became, in its gigantic size, the largest church of the world. The first generation of the seventeenth century strove indeed for grandiose, colossal, overwhelming effects.

Music responded with the luxuriant growth of polychoral works. Willaert's modest double choruses of seventy and eighty years before would have little impressed the age of St. Peter's. Four, six, and more choruses were not exceptional, particularly in Rome. When the cathedral of Salzburg was inaugurated in 1628, two years after St. Peter's, the Roman Orazio Benévoli wrote a festive Mass for eight choruses, vocal and instrumental, with the accompaniment of two organs, and he doubtless was pleased on seeing it printed in a score nearly a yard in size.

Still, it should be realized that all these 'Roman' masters, however up to date in their trend toward the colossal, were strictly conservative; they had their roots in polyphony and almost ignored the monodic style with its *recitativo* and *rappresentativo*.

André Maugars, the French violist just quoted, described a polychoral performance at Rome that he had attended in 1639:

"The church, in which two organs and music lofts are built in on either side of the high altar, was rather long and spacious. There were eight other lofts eight or nine feet high in equal distances along the nave, four on either side. Each chorus had its own portable organ.

"The conductor, in the midst of the best singers, beat time for the first chorus. Each other chorus had a sub-conductor who watched his gestures to keep time himself so that nobody lagged behind. The counterpoint was florid and full of beautiful melodies and pleasant recitatives. Now a soprano from the first chorus would sing a solo; now another from the third, fourth, and tenth chorus would answer. Sometimes two, three, four, or five voices from different choruses sang together, and sometimes all the choruses repeated a section after one another. Again, two choruses competed, and two others answered. Thereafter, three, four, and five choruses would sing together, and then one, two, three, four, or five solo voices; and all the ten choruses joined in the *Gloria patri*. I confess I had never before enjoyed anything as much as this performance."

GERMAN AND ENGLISH SONGS. Germany's central figure was, in this as in the preceding generation, the venerable Heinrich Schütz. The masters around him were of an infinitely smaller size; and yet they played a vital role in preparing the modern *Lied*. They reached eagerly for the novel thoroughbass style of Italy, but, just like Schütz, they made it subservient to German ideas. Away from the operatic aria of the Italians, they resumed the tradition of the *Liederbücher* of the fifteenth century, of Heinrich Finck and of Hassler, in new monodic forms. And within a few years, they reached an early peak in Heinrich Albert's *Arien oder Melo-*

deyen (1638-1650), Andreas Hammerschmidt's *Weltliche Oden oder Liebes-Gesänge* (1642-1649), and Adam Krieger's *Arien* (1657). In these titles the word arie is not meant in the sense of the Italian *da capo* aria, but rather denotes short, strophic songs similar to those that Giulio Caccini had called arie in his collection *Nuove Músiche* of 1602.

While these secular songs had a merely national scope, the powerful chorales that the cantor Johann Crüger (1598-1662) wrote in Berlin have reached the Protestant world in all the continents. His influential collection *Praxis pietatis mēlica* (1647) had no less than forty-six editions in Berlin alone, and some of his individual melodies, like *Jesu meine Zuversicht* and *Nun danket alle Gott* and *Schmücke dich o liebe Seele*, have found their way into the liturgies of a great many denominations.

England, meanwhile, delighted in a peculiar form of part-singing known as the *catch*, a round or canon, very often with a text of the most robust indecency. 1609 is the date of the earliest printed collection of catches, and the famous compilation *Catch That Catch Can* for three and four voices, edited and published in 1652 and after by John Hilton in London, represents about the zenith of this national form.

However, the England of audacious catches also had *The First Book of Selected Church Music* printed in 1641.

I NSTRUMENTAL MUSIC. Italy's main instrumental contribution was the concerto. The name, originally denoting accompanied vocal music, monophonic or polyphonic, began hesitatingly to designate a new, instrumental form of *canzona*, in which a soloist, generally a violin player, performed in a free virtuoso style between the various ensemble sections. It was from this Italian one-movement *canzona concertata* (under whatever name it might appear) that the con-

certo in its modern form developed in the last quarter of the seventeenth century.

The *canzona* proper, once a motley serialization of short episodes in different tempos, rhythms, and styles, accomplished the transition to the *sonata*, in the later sense of the word, by reducing the number of episodes and increasing their length.

France, England, and Germany may be represented here by only one outstanding instrumental composer each: Chambonnières, Locke, and Froberger.

Jacques Champion de Chambonnières was born around 1600 and died in 1670 as King Louis XIV's chamber harpsichordist. The output of his pen is not impressive in quantity: he left only two collections of *Pièces de Clavessin*, both printed in the year of his death and recently republished in one volume. (A *rondeau*—that is, one and the same refrain alternating with different couplets—is reprinted in the author's *Commonwealth of Art*, New York 1946, on page 145.) But these few pieces, generally shorter dance forms, have a dash, delicacy, and melodic breath that give them an incontestable place next to the greatest masters of the harpsichord; and the French are right in calling him the patriarch of the glorious school of clavecin playing.

Matthew Locke (c. 1630-1677), pugnacious court composer to King Charles II and organist to Queen Catherine (of Braganza), excelled in other fields. He wrote masques, the musical parts for several (spoken) dramas, among them Shakespeare's *Tempest* and, allegedly, Davenant's version of *Macbeth*, and numerous anthems and ayres. And he led the consort from the old phantasy form into the suite of dances. Moreover, Locke left a small treatise under the title of *Melothesia, or Certain General Rules for playing upon a Continued Bass* (1673).

The composer was as unruly as the man. He had an angular, rugged, and often violent style. Indeed, in a time when expression marks were unusual in England and a steady crescendo or diminuendo unknown all over the world, he would pre-

scribe "lowd, soft, softer" or "lowder by degrees" and climax this gradual crescendo with a "violent." No doubt, he was a highly gifted master and considerably more than, as one of his many opponents called him, "a frightful scarecrow, stuffed with straw."

In the field of instrumental chamber music, the old *diferencia* of the Spaniards was fully up to date in England under the name *division on a ground*. It still was a variation in increasingly rapid passages on an *ostinato*, which the player performed "as his Skill, and present Invention, do then suggest unto him." This quotation is taken from the outstanding source of that practice, Christopher Simpson's book *The Division-Violist: or, an Introduction to the Playing Upon a Ground* (1659).

In order to perform divisions in an adequate way, the player had to avail himself of a division-viol "of something a shorter Size than a Consort-Basse [the usual gamba], that so the Hand may better command it."

A still shorter size of gamba was assigned to playing *lyraway*, an expression that referred to a bowed instrument of the time, the short-lived *lira da gamba*, which was played in full chords.

The German Johann Jacob Froberger, of whom we know neither the year of his birth nor his home-town, was, with interruptions, organist to the court of the emperor at Vienna between 1637 and 1657, but he spent the first four years of that time in Rome studying with the greatest Italian organist, Girólamo Frescobaldi. He died in 1667 in a castle of his patroness, the Duchess Sibylla of Württemberg, in eastern France. Unlike Schütz, he specialized in instrumental, indeed, in keyboard music. He wrote a number of beautiful *toccatas* with a thoroughly personal stamp and created the dance suite for harpsichord (instead of individual instruments), which later culminated in the English, French, and German suites, or *partitas*, of Bach, but even earlier had been instrumental in giving birth to the sonata.

The arrangement that Froberger and Matthew Locke gave

the suite was different from that of the generation of Schein. To the older stock—*allemande*, *courante*, *sarabande*—they added, as a fourth movement, the rapid *gigue* in 6/8 or 2/4 time, once the *jig* of merry old England, but they added it before or after the *courante* and not, as later, at the end, so that the two usual arrangements were:

| | | | |
|------------------|-----------------|-----------------|------------------|
| <i>allemande</i> | <i>courante</i> | <i>gigue</i> | <i>sarabande</i> |
| <i>allemande</i> | <i>gigue</i> | <i>courante</i> | <i>sarabande</i> |

Musicians should be warned against taking the modern slow and dignified conception of the saraband for granted. This Spanish-American dance, in its beginnings naughty rather than respectable, had been fast, not solemn, and as late a man as Thomas Mace still characterized it in his *Musick's Monument* of 1676 as "more toyish, and lighter than Corantes." Indeed, Johann Joachim Quantz, as Chapter 17 will show, gave it, in 1752, the tempo of the *gigue*: MM 80 to the quarternote.

The "corante" itself asks for a similar comment. The name denoted two very different dances in the seventeenth century. The Italian *corrente* was still a lively dance in 3/4, in keeping with the proper sense of the word: running. But the French *courante* changed its character sometime around 1630 and became a *danse très-grave* in six beats which were organized in fascinating shifts from 3/2 to 6/4. Hence the contradictory tempo indications in contemporary music and musical manuals; Bassani marked it *largo* in 1677, Johann Kuhnau, "rather quickly" in 1689, and Johann Joachim Quantz, MM 80 for the quarternote. Bach used either national type in his suites and *partitas*.

SCIENCE AND INSTRUMENTS. As a new trait, the time presents two portly, comprehensive tomes which extended the then modern enthusiasm for scientific research to the realm of music. One is the *Harmonie Universelle*, pub-

lished in 1636 and 1637 by Father Marin Mersenne, a friend of the philosopher René Descartes; the other is the *Musurgia Universalis* of Father Athanasius Kircher, a German Jesuit in Rome. Mersenne wrote in French, and Kircher, in Latin. But each is a consummate scholar and scientist without any attempt to be popular, and each, as the two titles imply, had a universal, anti-specialistic attitude. Their approach to music, to the whole of music, was preponderantly mathematical and physical; therefore, they dedicated an essential part of their works to the instruments and the details of their mechano-technical construction, down to the materials and thickness of soundboards and strings.

The instruments themselves were progressing rapidly. The organ was substantially improved; equalizing double bellows and a wind gauge controlled the wind pressure, the number of stops was growing, and small-scale 'string' or 'bowed' pipes like the *gamba* were introduced. But the organ's timbre was still dominated by the light-colored four-foot stops.

Since some readers will not be familiar with the term four-foot, a brief explanation must be inserted here. The great or 'cello C, at one time the lowest key of the organ, provides the expected note if the corresponding pipe is just eight feet long; it provides small or viola c if the corresponding pipe is just four feet long; it provides counter- or doublebass C if the corresponding pipe is just sixteen feet long. Hence, organ registers, or 'stops'—that is, complete sets of pipes—are given the title 8' if they have an eight-foot pipe on the C key and therefore agree with all the keys on which they are played; they are given the title 4' if they have a four-foot pipe on the C key and therefore sound an octave above the normal; they are given the title 16' if they have a sixteen-foot pipe on the C key and therefore sound an octave below the normal. Correspondingly a 2' sounds two octaves higher, and a 32', two octaves lower. In a figurative sense, our modern piano is exclusively an 8' instrument, but the harpsichord had also a 4' stop connecting a whole set of strings half the normal length and sounding an

octave higher, and occasionally a 16' stop connecting a set of strings double the normal length and sounding an octave lower.

Around the middle of the seventeenth century, the harpsichord was provided with the regular arrangement of two eight-foot and one four-foot stops, or 8'8'4'. In other words, it had two sets of strings in normal length, and one set half as long and therefore sounding an octave higher. The two eight-foot stops did not serve merely as duplication and therewith intensification; for where there were two, three, or four stops, their actions had to be placed behind one another, with the result that each of them plucked the strings at different spots and thus created divergent timbres. The motion imposed on the string by plucking (or striking, or bowing) was particularly strong at the point of attack and excluded the formation of nodes there; one result was the deficiency of certain partials (cf. page 384) and hence a timbre different from that caused by an action on any spot nearby.

Sixteen-foot stops, sounding an octave lower, were not considered in either the sixteenth or the seventeenth century, and even in the eighteenth century were given only to a few German instruments and during a very short time.

Modern harpsichordists must also be warned against any lavish change of timbre within a piece. The stop-handles on ancient instruments could not be operated without interrupting the performance, and when a certain harpsichord-maker in London, whom Thomas Mace mentioned in his *Musick's Monument*, devised pedals to alternate between "several various stops at pleasure, and all quick and nimble, by the ready turn of the foot," nobody cared—such alternation was not to the taste of the time.

Italy had yielded its forward position in harpsichord building to Flanders and the then leading dynasty of the Ruckers in Antwerp. Instead, she brought the construction of violins to a second peak under the headship of Girólamo's son Nicola

Amati in Cremona (1596-1684). At the same time, Germany and England produced their earliest and greatest violin makers, Jacob Stainer in Absam near Innsbruck (1621-1683) and Thomas Urquhart in London (b. 1625).

The earlier predilection for wind instruments had gone. They were not flexible enough for the new monodic, expressive style; and taste had drawn away from the motley alternation of glaring colors that the winds provided, toward a unified, more neutral timbre.

The art of violin playing reached an early peak with Italian virtuosos like Biagio Marini (c. 1600-c. 1655), a native of Brescia who spent many years at German courts, and Carlo Farina from Mantua, whose dates of birth and death are unknown. Their dance tunes, sonatas, and trios required an accomplished technique, including such refinements as the fifth and sixth positions, double and triple stops, *scordatura* (or irregular tuning), and bowing close to the bridge (*sul ponticello*) or with the wood of the stick (*col legno*). Double stops, by the way, had occurred at least as early as the middle of the sixteenth century.

Under the influence of Marini, Germany produced outstanding violin virtuosos who specialized in double stops and polyphonic playing, thus preparing for the technique of Bach's sonatas for a solo violin. The most famous of these men, Thomas Baltzer, went to England in 1656 and became concert master of King Charles II.

England was still opposed to violin playing, however. According to contemporaries, the *gamba* was a respected instrument, but the violin belonged to "common fiddlers" only. Still, it made headway. Matthew Locke's *consorts* were written "for Viols or Violins . . . either alone or with Theorbos [cf. page 200] & Harps."

France, however, welcoming the violin as the typical dance instrument fit to accompany her court ballets, created the leading orchestra of the time under the name *Les Vingt-Quatre*

Violons du Roy, 'The Twenty-four Violins of the King. This ensemble consisted of:

- 6 first violins (*dessus*)
- 4 second violins (*quintes*)
- 4 third violins (*haute-contres*)
- 4 violas (*tailles*)
- 6 basses (between violoncelli and double-basses)

The French words added to the modern names above meant voice-parts, not instruments, and could be used for any combination of instruments. The *quinte* had nothing to do with the five-stringed violin *quinton* of the following century, but stood for the older Latin *quinta vox*, that is, the fifth voice-part added (anywhere) to the normal four parts.

The demands on violin playing, however, were increasing so rapidly that Jean-Baptiste Lully, himself an excellent violinist, created, besides the Twenty-four, an elite orchestra of only sixteen, under the name *Les Petits Violons du Roy*, who were already in existence in February, 1656.

France was also reaching a peak of lute playing with Denis Gaultier *L'Illustre* (c. 1600-1672), who gave his instrument the solid polyphonic structure that it had generally lost for the sake of easy technique. His principal work (c. 1655) is a collection of suites under the title *La Rhétorique des Dieux*. After him, Charles Mouton (c. 1626-c. 1710) closed the heyday of French lute playing.

While the Germans clung to the lute for another hundred years, the French turned brusquely to the less assuming guitar with five double strings, which was being brought into fashion by the then modish Italian comedians in Paris and the great virtuosity of Francesco Corbetta, or Francisque Corbett (d. 1681), a favorite at the court of Louis XIV in Lully's time. AS 89 records a few of his dance tunes and of those of his best disciple, Robert de Visée, which charmed the court to such an extent that a contemporary made fun of "the universal strum" that they conjured up in the palace.

AT LONG LAST, manuscripts and prints of the time have the familiar, modern forms of our notes and, with the forms, the familiar, modern time-values. Since the seventeenth century, the breve, not the long, has corresponded to a double wholenote; the semibreve, to a wholenote; the minim (once a diamond with cauda), to a halfnote; the semiminim, to a quarternote; the fusa (once a black diamond with cauda and flag), to an eighthnote; and so on.

The English and the Italians, as well as the Spaniards, have stuck in part to the Latin terms, which, as we have seen, were obsolete and wholly inadequate as early as the end of the thirteenth century. They do not hesitate to call the largest current unit, the wholenote, a 'half-short'; the halfnote, 'smallest'; and the quarternote, 'half-smallest.' The United States, on the contrary, has followed the German example in taking the 4/4 bar as the unit of length and simply dividing it into halves, quarters, eighths, sixteenths, thirty-seconds, and so on.

Although the traditional terms denoted different time-values, the tempo had not changed. Christopher Simpson and Henry Purcell both state that the semibreve should last "as long as you can moderately tell four"—which is more or less what had been, two hundred years before, the value of the long, then equivalent to the modern wholenote.

READING: Manfred Bukofzer, *Music in the Baroque*, New York, 1947. Henri Prunières, *Cavalli et l'Opéra vénitien du XVIIe siècle*, Paris, 1932. Walther Vetter, *Das frühdeutsche Lied*, 2 vols., Münster, 1928. K. Seidler, *Untersuchungen über Biographie und Klavierstil Johann Jacob Frobergers*, Diss., Königsberg, 1930. Curt Sachs, *World History of the Dance*, New York, 1937: Chapter 7. Curt Sachs, *History of Musical Instruments*, New York, 1940: Chapter 16. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1642.

LISTENING: AS 82, 89, 92.

15

THE AGE OF LULLY AND PURCELL

1670-1710

THE LAST PART of the seventeenth century belonged mainly to the Italians, the French, and, deriving in part from the Italians, the English. The French were beginning to export their orchestra players, and the Italians were exporting their composers, conductors, and singers to almost all the courts of Europe.

THE VENETIAN OPERA reached a last climax outside Italy in the noble style of the North-Italian Carlo Pallavicino (1630-1688) and of the Venetian Agostino Stéffani (1654-1728), who produced their masterworks in the same year, 1687: the former produced *La Gerusalemme liberata* (Liberated Jerusalem), and the latter (of whose style the chamber duet on AS 29 gives a good idea), *Alarico*. Both men lived at German courts; both operas were performed in Germany, one in Dresden, and one in Munich.

In Italy herself, however, the Venetian opera degenerated to the so-called machine opera, in which the tricks of the stage—all imaginable kinds of apparitions from the sky and the underworld (the famous *deus ex máchina*), audacious, fanciful transformations, and incredible sceneries—became the

essential ingredients of the performance with precedence over music and poetry, and in which the chief engineer was the most important and best-paid figure of the cast. A contemporary description of a few amazing tricks can be found in English translation in the author's *Commonwealth of Art*, New York 1946, page 229.

BUT THE VENETIAN OPERA no longer monopolized the musical drama. Another style of operatic art had been established in Naples. This so-called Neapolitan opera derived from scores that Francesco Provenzale, of Naples, had written in the 1650's, and it celebrated its earliest triumphs with the works of the Sicilian Alessandro Scarlatti (b. 1658 or 1659, like Purcell, d. 1725 at Naples), one of the most prolific musicians, who composed no less than one hundred and fifteen operas, almost seven hundred cantatas, and two hundred Masses, not to mention oratorios, motets, and harpsichord pieces in various forms.

The Neapolitan operas were opened by overtures in a new form, named for Scarlatti or simply called 'Italian' overtures. Differing from Lully's 'French' overture, they had three sections, in the arrangement allegro-adagio-allegro.

Inside the opera, the 'Neapolitan' masters were not much interested in instrumental music, nor in dancing, machines, or sumptuous display. But they were not much interested in truly dramatic action either. Giving predominance to music, they developed the only extra-musical trait that music was able to enhance: description of human characters, heroic, generous, or bad. And eventually such description could not avoid the fate of early stereotyping—not even in the hands of the most influential and probably the greatest of librettists, Pietro Metastasio (1698-1782), who provided texts for a century of composers, for Scarlatti, Handel, and Mozart.

The recitative, once the backbone of the opera as the carrier of all dramatic and epic phases, lost more and more of its character, descended to an unemotional, hasty, matter-of-fact *parlando* with a few routine chords on the harpsichord—the so-called *recitativo secco*, or ‘dry’ recitative—and was eventually left to the haphazard improvisation of the singers themselves. The aria, in the *da capo* form ABA, was given almost exclusive rights—so much so that contemporaries sneeringly spoke of the Neapolitan opera as a “bundle of arias”; and with the undramatic stress on well-wrought, lyrical, and heavily ornamented melodies, the interest inevitably shifted to the sensuous beauty and acrobatic virtuosity of the voice—the *bel canto*—and to the singers themselves, *castrati* and *divas* who, incredibly arrogant, imposed their will and whim on conductors, stage-directors, and the very composers.

THE ENGLISH stood close to the Italians, with Purcell, composer to the Royal court, as their greatest master.

Henry Purcell was born in London in 1658 or 1659, died, only thirty-six years old, on November 21, 1695, and was buried beneath the organ of Westminster Abbey, which he had played since 1680. This is about all we know of the man and his life and death.

Like Mozart's, this pitifully limited life sufficed for a musical production astonishing in depth and versatility. It included a true opera, incidental music for forty spoken dramas—among them Betterton's *Dioclesian* (1690) and Dryden's *King Arthur* (1691)—the anthems, services, and hymns that his connection with Westminster Abbey demanded, the odes and welcome songs on sawdust texts for the Royal family, much chambermusic, such as fantasias, sonatas, and Lessons for the harpsichord, and a good number of catches (whose robust texts are sanctimoniously purged in all reprints).

The first of Purcell's kings, Charles II (1660-1685), had brought back from his exile in France a strong partiality to everything French, including music. On his return, he established The King's Private Band of twenty-four pieces in imitation of the twenty-four *Violons du Roy*, and made no secret of his aversion to the "heavy" music of England. Purcell condemned this sort of courtly music as dance-like and superficial. Against the taste of his sovereign, he followed, as he expressly stated in the preface to his earliest sonatas (1683), the most celebrated Italians for the inspiration of their austere gravity in order to retrieve the almost lost tradition of England with its sense of noble, sedate dignity. Therewith he found himself in the company of Elizabethan musicians with their madrigals and Church polyphony and of Chaucer and Shakespeare, who also had looked to the South for models and standards.

Italian influence is particularly obvious in Purcell's chamber music, of which the so-called *Golden Sonata* in *F* major for two violins, a bass, and a harpsichord in the truest style of Corelli, Vitali, and Bassani, has been recorded—as the most widely known—on AS 22. But Italian influence is no less decisive in his only real opera, *Dido and Aeneas*, which he wrote as an amateur play for a fashionable girls' school graduation, and above all in its climax, the beautiful lament of the dying queen on a solemnly striding *ostinato*, or ground. The opera was thoroughly un-Italian and English, though, in the importance that it assigned to the chorus and the dancers.

In the religious field, Purcell, as well as his teacher John Blow (1649-1708), gave the Anglican anthem the festive high-Baroque form that Handel brought to a climax a little later. They introduced the sparkling color of instruments and added a jubilant *Alleluia* in a majestic choral fugue as a grandiose ending. And grandiose he was also in his hymns and *tedeums*, restoring the forceful polyphony of the Tudor masters, which the Puritan revolution had almost destroyed, and paving the way for Handel.

THE GERMAN OPERA had little importance. Most poets, composers, and singers for the princes' stages were imported from Italy. As late as the middle of the eighteenth century, King Frederick the Great of Prussia said that he would rather be neighed to by his mare than listen to a German singer. The only public and permanent opera with German plays and German personnel was that in Hamburg from 1678 to 1738. Its inauguration with Johann Theile's *Adam und Eva* and a strong predilection for subjects from the Old Testament were decent enough. But around 1690, the Biblical themes made way for mythological banalities and for local sensations with ghastly execution-scenes and genuine blood from pigs' bladders. Alas, one of the worst, with the pirate *Störtebeker* (1701) as its hero, was written by a master whose genius knew better—Reinhard Keiser (1674-1739), a highly gifted, prolific composer and a charming adventurer who would now shock the respectable Hamburgers with princely ostentation, now disappear from the sight of cheated creditors.

THE OPERA IN FRANCE was late because her great ballet tradition and the flowering of spoken tragedy retarded the beginnings of a style that exacted drama of the musical stage and lyricism of the dramatic stage. As late as 1636, in his *Harmonie Universelle*, the Frenchman Father Mersenne could mention as an unusual and remarkable fact that Italian singers used to perform with so convincing an expression that the listener might confuse the passion they were rendering with their personal emotion.

No less than three-quarters of a century after the advent of the musical drama in Italy, numerous futile attempts and serious setbacks on the stage of France led at last to an opera

in France. The first important step was taken by two native Frenchmen, the poet Pierre Perrin and the composer Robert Cambert (c. 1628-1677), who performed the 'pastoral' *Pomone* in Paris in 1671. However, associated with a couple of rascals, they declared bankruptcy and, in all their misery, were happy enough to sell to Lully their royal privilege for performing operas.

GIOVANNI BATTISTA LULLI, born on November 29, 1632, in Florence, was brought to Paris in 1646, under somewhat uncertain circumstances, to "keep company" with the nineteen-year-old Duchess of Montpensier, one of the leaders of the *fronde*, or opposition against the king (Louis XIV). In 1653, however, Lulli left the Duchess, went over to the royal camp, danced in the court ballets, and was appointed—once more we do not know exactly why—composer of the king's instrumental music. Eight years later, the favorite of fortune got the title and position of a superintendent and composer of the royal chamber music and at the end of the year became a French citizen under the name of Jean-Baptiste Lully.

Admirable musicianship and energy, a genius for anticipating the needs of the Parisian public, the unwavering affection of the king, and the ruthless disposal of competitors granted him successes such as few musicians had, in his art as well as in his civil, capitalistic life—in whatever sense one might use the word. On the crest of his career, making an ostentatious display of devotion to his monarch in a solemn *tedeum* after the king's recovery from some disease, he himself contracted a sepsis from hitting his toe while beating time on the floor with the pounding baton used by the conductors of his age, and met his death on March 22, 1687.

After having devoted twenty years to writing court ballets,

Lully turned to the opera proper as a mature master of forty and left sixteen scores in this field. Outstanding were:

Cadmus et Hermione 1673 (AS 114)

Alceste 1674

Thésée 1675

Atys 1676

Isis 1677

Bellérophon 1679

Persée 1682 (AS 20)

Phaéton 1683 (AS 114)

Acis et Galathée 1686

Armide 1686 (AS 20)

The privilege that he had bought from Perrin allowed him to show these operas first at court and subsequently in the public opera house called the *Académie Royale de Musique*. There, some of them were kept on the repertoire for a hundred years—until Gluck's works replaced them.

The character of Lully's operas was thoroughly French. Frenchmen have always worshipped the spoken word, its accent, meter, and timbre, and have never permitted it to yield either to music or to pantomime. As a consequence, the melodic material of their musical dramas has had a reserve almost unknown to Italians. Lully complied with this national respect for the word, not only because he had himself the necessary intelligence and adaptability, but also because he found in Philippe Quinault a congenial librettist and in Molière a faithful adviser. After his first experiments with the recitative to the dry accompaniment of a bass and a harpsichord, Lully achieved in the court ballet *Le Triomphe de l'Amour* (1681) a recitative accompanied by the orchestra which allowed for so thorough a unification in style that the verses ran smoothly from scene to scene, the recitative becoming ariose, and the arias, almost recitativic. Moreover, this 'endless' melody was carefully modeled after the inflection and accents of the greatest actors, whom he used to study in the *Comédie Française*.

No less French than Lully's attention to the individual

word and the cadence of the spoken sentence were the moods and images depicted in his works. Early French opera would be unthinkable without emotions like those expressed by raging tempests and the miracles of enchanted gardens or moonlit nights, of which the Florentine master has given the classic models (AS 20).

Again, Lully stressed the significance of purely instrumental episodes and, above all, of the overture, which, as the 'French' overture and in opposition to the so-called Italian overture of the Neapolitans, followed the pattern of a first, majestic, and somewhat strutting section in a sharply dotted rhythm, a second section in quick *fugato* with the successive entries of all the instruments, and a coda in the first tempo, all without interruption (AS 114; cf. also AS 52, which, although by the German Johann Caspar Ferdinand Fischer, is entirely dependent on Lully).

With such a stress on instrumental music, Lully restored the orchestra—which had some forty pieces in his time—to an importance in French opera that it was steadily losing in Italian scores. And in doing so, he became the patriarch of modern orchestration, whose ingenious, delicate coloring has provided even as late a master as Berlioz with characteristic examples for his *Treatise of Instrumentation*.

The opera in a narrower sense was only a part of Lully's activities. Before writing operas, from 1653 on he had written numerous court ballets, which were, however, so amply provided with singing and independent instrumental music that they must be considered as important steps towards the unavoidable opera. Molière took the last step but one when he introduced in 1661 the idea of a comedy-ballet, in which a play was, as he said, "sown on a ballet." Such were *Le Mariage forcé* (1664) and *Princesse d'Élide* (1664). Lully continued to write comparable ballets after having veered to the opera proper; in 1681 he dared even to open the stage to female dancers as a never-heard-of and heartily acclaimed innovation. And his very operas gave a prominent place to dancing.

THE OUTSTANDING DANCE in whose development the musician (and dancer) Lully had a dominating position, was the courtly, new *minuet*. In its dainty, mincing, reserved steps, it represented the last sublimation of the wooing-couple dance that the age of the troubadours had created.

Musically, the minuet had a fascinating counterrhythm, the steps contradicting the accompanying music: the latter proceeded in $3/4$ time, while the steps—right-left, right-left—asked for duple time:

| | | | | | | |
|--------|-------|------|-------|------|---|---|
| steps: | right | left | right | left | | |
| | 1 | 2 | 3 | 4 | | |
| music: | 1 | 2 | 3 | 1 | 2 | 3 |

This counterrhythm was certainly attractive, but not without risks. Hence, contemporary dance manuals asked the accompanying musicians not to stress the strong beats of the even-numbered bars, lest the dancers get confused. This is why syn-copated minuets, such as the one in Mozart's last G-minor symphony, are not "stubborn" but, on the contrary, true to pattern.

The French often wrote minuets for a trio of two oboes and one bassoon, and Lully, particularly, for the sake of contrast, liked to give this limpid, brisk orchestration to the second of two subsequent minuets—*menuet en trio*. In the eighteenth century, the term *trio* passed to the middle episode between the minuet and its repetition in the typical symphony, even if its orchestration did not justify the title; and in a similar way, the nineteenth century kept the name for the corresponding episode in the scherzo.

The minuet was dignified but fast: writers of the seventeenth and eighteenth centuries call it "rather rapid" and give two of its quaternotes to one pulse beat, that is, ♩ = MM 160.

ISTRUMENTAL MUSIC. The main repository of the dances—both those up to date and those no longer performed in the ballrooms—was the instrumental suite. Around 1670, it still followed the arrangement of Froberger's and Locke's suites, with the *gigue* somewhere in the middle. But the taste of the end of the century began to prefer another sequence, and in 1693 a Dutch publisher deemed it prudent to reprint the late Froberger's suites, as the title says, "in a better order." Since then, the lively *gigue* has invariably stood at the end to serve as a sweeping Sir Roger.

In the same decade, it became an accepted practice to give the suite one or more additional movements from the current dance repertory, such as the *bourrée*, the *gavotte*, the *minuet*, the *passepied*, or the *rigaudon*.

The suite of the French was still, as it had been before, an optional set of dances without a definite order. On the other hand, it pushed forward to the later symphony by merging with the so-called French overture, of which it also often adopted the name. In this kind of *overture*, an actual operatic overture of the French or Lully form (page 247)—which is still recognizable in the first movement of our symphonies with their slow introductions—was followed by a series of dances or dance-like movements, such as *airs*, *ballets*, *marches*, *minuets*, in a motley order and often with *doubles*, or repetitions, in richer ornamentation. AS 52 gives two German examples, by Rosenmüller and by Johann Caspar Ferdinand Fischer.

The various movements of the French suite often had characteristic headings, such as *La Coquette*, *Harlequin*, *La Pastourelle*, which must be interpreted as labels rather than as programs. It has been said that such titles expressed relations to the court ballet. This, however, cannot be true, since they also occur in instrumental pieces totally different from dances, as later in Jean-Philippe Rameau's *Pièces de clavecin en con-*

certs (No. 5 on AS 30). It would probably be more justifiable to trace them to the rationalism of the French, which has always preferred a definite lead and fixation of the mind to the impalpable vagueness of untitled music. Lionel de la Laurencie, one of the greatest historians of French music, was certainly right when he said in another context that "the Frenchman, thoroughly intellectual, does not stand sonorous emotion unless it is associated with a precise idea and feels at ease only when the sentimental merchandise is covered by the intellectual flag."

THE OUTSTANDING FIGURE of French instrumental music was François Couperin, surnamed *le Grand*. He was born in Paris on November 10, 1668, became harpsichordist to the court and teacher of the princes, also played the organ at the church of Saint Gervais (which has been preserved in its original form), and died at Paris on September 12, 1733.

As an organist, Couperin wrote organ music to go with the Mass (AS 75) and even a famous vocal work for one and two voices under the title *Leçons de Ténèbres*, to be sung at Matins and Lauds on the 'dark' days of Easter week when the candles were being extinguished one after another (the word *leçon* having just as little didactic meaning as the English word *lesson* as it is used in religious services).

He also created instrumental chamber music: the concerts in honor of Corelli and Lully (*Le Parnasse ou L'Apothéose de Corelli*, 1724, recorded in AS 115/116; *Concert . . . composé à la mémoire immortelle de l'incomparable monsieur de Lully*, 1725); and four *Concerts Royaux*, or suites, which he wrote for the informal Sunday afternoon receptions in the palace of Versailles shortly before the death of Louis XIV (1715) and later appended to the fourth book of his *Pièces de Clavecin* (the second of these concerts is on AS 13).

But Couperin's most important works were devoted to the harpsichord, either as a solo instrument or else in a chamber ensemble with a crossflute or a few bowed instruments. He carried the harpsichord to a peak of delicacy, inventiveness, and humanity. Now majestic, now tender, playful, pastoral, melancholy, humorous, exuberant, he was ever different and ever the same—The Great.

His finest harpsichord music was printed in four volumes of *Pièces de Clavecin* (1713, c. 1716, 1722 in the year of Bach's *Well-tempered Clavier* I, and 1730), some of which are recorded in AS 109.

In Couperin's harpsichord music, the proper way to perform, and particularly the skillful and tasteful treatment of the graces, was so vitally important that the master himself found it necessary to publish a special method of playing under the title *L'Art de toucher le Clavecin* (1716).

THE ITALIAN SUITE, generally called *sonata da cámara*, was neither written for outdoor ensembles, as in Germany, nor for keyboards, as in France, but for some chamber combination with a thoroughbass. The term itself appeared first outside Italy in suites of the Veneto-German Johann Rosenmüller (1620-1680), one of which is recorded on AS 52. The outstanding monuments of *sonata da cámara* are the two dozen of Arcangelo Corelli's sonatas for violin and harpsichord published as *Opus 2* in 1685 and as *Opus 4* in 1694. As a rule, they were in four movements with a *preludio* at the beginning and a *giga* or *gavotta* at the end.

Incidentally, it is rewarding to have a look at Volume 1 of the *Zeitschrift für Musikwissenschaft* (1918/19) on pages 292f and to realize in what almost incredible ornamental distortion the familiar melodies of these sonatas were, or could be, played around 1700.

Corelli's name has also been connected with a certain kind of cadence or concluding formula, the so-called Corelli clash, which, however, can be traced back at least a whole generation to Stefano Landi's opera *Il Sant'Alessio*. It consisted of the harsh collision of the upper voice, which anticipated the final note on the upbeat, say C, and the second voice, which at the same time played the leading note B before it turned to C on the downbeat. Examples from the 1690's are in Johann Pezel's tower music (AS 2).

Opposed to the *sonata da cámara*, the Italians had, from the 1680's on, a *sonata da chiesa* (pron. *kiāsah*), or church sonata, which had little to do with the Church. In it, they dropped the dance titles of the individual movements, and gradually also their dance-like character. Instead, they passed to the free movements of the later sonata under tempo titles—*Adagio* or *Allegro* or *Presto*.

A second instrumental form that Italy created was the concerto.

Concerto, a name given during the sixteenth and seventeenth centuries to several very different kinds of music, and even of vocal music, came to rest for good as the title of a symphonic form in which one or several soloists competed with an orchestra, the Italian verb *concertare* meaning 'to agree.' Where there were several soloists, the form was more specifically called *concerto grosso*.

In the contrasting movements of the *concerto grosso*, a group of soloists with an accompanying harpsichord formed the *concertino*, or small concerto. As a rule, it consisted of two violins and a violoncello. Its partner was the full orchestra, *concerto grosso* or *ripieno* ('filling'). Alessandro Stradella (c. 1645-1681) seems to have been the initiator; Giuseppe Torelli (1650-1708) and Arcangelo Corelli (1653-1713) created the first masterworks in this novel form around 1680. The *grosso* was, as a rule, very small compared with modern orchestras, but as an exception, Corelli's *concerti* were performed at Rome in 1682 with no less than a hundred and fifty pieces.

We speak of a solo concert, on the contrary, where only one soloist acts against the orchestra. The form is somewhat younger than the *concerto grosso*, just as the solo sonata is younger by a few years than the trio sonata. Not much before 1700 did Tommaso Albinoni (1674-1745) and, once more, Giuseppe Torelli compose the earliest concertos for one violin and orchestra. Concertos for keyboard instruments belong in the subsequent generation only; as the earliest ones, Bach wrote thirteen concertos for the harpsichord, and Handel, eighteen concertos for the organ.

WHILE THE BULK of German composers depended on French or Italian models, two masters embodied the spirit of the later Baroque in Germany without any foreign interference. These men were Buxtehude in the North and Biber in the South.

Dietrich Buxtehude (1637-1707), a native of Helsingborg in Sweden, was by far the greater of the two. Organist at St. Mary's in Lübeck on the Baltic Sea, from 1668 on, he conducted annually the celebrated *Abendmusiken*, or Evening Concerts, in Advent, to which young Bach, then twenty years of age, made a reverent pilgrimage. As a composer, Buxtehude left a large stock of organ pieces, choral cantatas, motets, and chamber music, in which he achieved a truly German Baroque, phantastic and powerful, flickering, restive, and angular, with florid, often bombastic coloraturas and sudden changes of tempo.

Heinrich Biber (1644-1704) from Bohemia, a violinist and conductor at the court of the archbishop of Salzburg (which became Mozart's court a hundred years later), was baroque in a different way, less phantastic and angular, but rather on the lookout for means and aims abnormal or singular. He wrote polyphonic Church music, sophisticated pieces for one unac-

accompanied violin, sonatas for harpsichord and a violin, and duos for two *viole d'amore* (which will be discussed in the next chapter). His violin was often used in *scordatura*, or 'distuning,' with all four strings, or only some of them, lowered or raised by varying intervals up to a fifth, so that they created new possibilities of chord fingering and also timbres different from the wonted colors of the violin, now softer, now sharper. One set among these sonatas describes scenes of the Passion of Christ (AS 94: The Mount of Olives) and adds a title vignette to each one in a strange combination of visible and audible illustration.

DESCRIPTIVE MUSIC had a good time indeed, in Germany as well as in France. One Johann Fischer (d. c. 1721) tried to depict, of all things, the salt-working process in the pits of Lüneburg, Northwest Germany, in a suite consisting of an overture, an *entrée*, an *aria*, a minuet, and two ballets for a violin, four oboes, and basso. In 1700, Bach's predecessor as the cantor at St. Thomas in Leipzig, Johann Kuhnau, published six Biblical sonatas for clavichord or harpsichord (which, incidentally, were *not* the earliest keyboard compositions under the title of sonatas). One of them, The Combat Between David and Goliath (recorded on a clavichord in AS 3), describes in seven short movements Goliath's bravado, the fear and prayer of the Israelites, David's courage, the duel—in which you hear the stone hurled at the giant and his collapse—the helter-skelter flight of the Philistines in an amazing fugue, the triumph of the Jews, and general dancing and joy.

If Kuhnau did not hesitate to describe the violent paroxysm of King Saul in parallel fifths and violations of Church modes in another of these sonatas, or, in still another, Laban's fraud in those misleading cadences that musical terminology calls

'deceptive,' he found himself topped when Marin Marais, the great French gamba player (one of whose compositions, for two viols and bass, is presented in AS 78), wrote a piece in 1717 for the gamba with a harpsichord as an accompaniment, which depicted the operation for stone in the bladder, including the sight of the apparatus, the patient's shuddering on seeing it, his decision to climb up into it, and so on, in all minute details and with pedantic explanations within the musical text in almost every one of its measures. A few lines of this curiosity are reprinted in the author's *Commonwealth of Art*, New York 1946, page 222; for more, see A. Lavignac, *Encyclopédie de la Musique*, part II, Vol. 3, page 1776.

INSTRUMENTAL MUSIC, except organ and outdoor pieces, was mainly performed at court and in the homes of noblemen and commoners. However, one generation after the foundation of the earliest public opera house in Italy (1637), the English evolved the earliest regular public concert-going. For six years, from 1672 to 1678, the excellent violinist John Banister, of London, once conductor of the King's Private Band, arranged performances of music in a rented room "over against the George Tavern in White Friars" with "a large raised box for the musicians, whose modesty required curtains." as a contemporary puts it.

After Banister, a young coal merchant in London, Thomas Britton, nicknamed "the musical small-coal man," organized weekly concerts in a loft over his storehouse in Jerusalem Passage, at first without any charge and later for a yearly subscription plus a penny for coffee. These concerts lasted for thirty-six years, from 1678 to 1714, the year of Britton's sudden death, and were given both by educated amateurs and by England's best performers, like Banister, Handel, and Pepusch.

THE INSTRUMENTS underwent decisive changes. The French interested themselves in improving the (transverse) German flute, which had been cylindrical and in one piece and therefore not tunable. And the oboe, which had been a shrill and noisy shawm, was so much refined in the hands of the French that it eventually found its way, together with the improved flute, from dance and military bands into the orchestra—at first, apparently, into Lully's orchestra. It was then that the French name *hautbois* (pron. *oboè*), or 'high wood,' conquered the world but in the correct phonetic spelling that the Italians used for the instrument. Another important acquisition of the French orchestra, operatic and symphonic, was the *horn*, which the English call the French horn, and the French, *cor allemand*. Whoever the reformer and whatever his nationality were, the instrument, once a hunter's horn not too different from a bugle, was given a long, narrow, and partly cylindrical tube with a widely expanding bell and, as a consequence, a wide overblowing range.

While the nationality of the French horn is not altogether certain, the *clarinet* was without a doubt developed in Germany. Originally a cylindrical folk-instrument with a single reed, known under the French name *chalmieu*, it became an art instrument in the workshop of the Denners—father and son—in Nürnberg, but struggled during a full hundred years for a permanent seat in the orchestra.

The Italians, meanwhile, reduced the clumsy half-bass of the violin family to the elegant size of the modern 'cello. The smaller dimensions and the consequent tone allowed the admission of the 'cello to solo performances. One Doménico Gabrielli (with double *I*) in Bologna wrote the first two sonatas for violoncello and figured bass and in 1689 *Ricercarj per violoncello solo*.

AS A CONSEQUENCE of the growing importance of keyboard instruments, the age around 1700 saw at last the realization of an idea that the Spaniard Ramis de Pareja (page 162) had anticipated two hundred, and the Chinese, one hundred years before: the *equal temperament*. Older, unequal systems, such as the one described on page 137, were very imperfect anyway, and became unbearable when the harmonic orientation of the latter part of the seventeenth century needed free modulation into remoter tonalities and, therefore, the integration, with equal rights, of the previously shunned, uncertain black keys, or *semitonia*.

The evolution was slow. Andreas Werckmeister (1645-1706), a humble organist somewhere in Saxony, did not invent the equal temperament. True, his pamphlet *Musikalische Temperatur* of 1691 and later writings describe a mathematically founded and viable method of tuning all kinds of keyboard instruments so that a player could easily and satisfactorily transpose into remoter keys. But Werckmeister's temperament was still unequal.

Not before 1724 do we find the description of an actual equal temperament with twelve perfectly even semitones per octave in Johann Georg Neidhardt's *Sectio canonis harmonici*.

As a consequence of the nearly and the truly equal temperaments, Johann Caspar Ferdinand Fischer (1650-1746), Kapellmeister at the court of the Duke of Baden, wrote in 1715 a cyclical work for some keyboard instrument under the title *Ariadne Musica*, which refers to the daughter of King Minos of Crete, who revealed the way through her father's labyrinth—the labyrinth here being the tangle of tonalities. The *Ariadne* contained twenty fugues with their preludes in nineteen different keys.

A few years later, Johann Sebastian Bach took up the same idea in the first part of his *Wohltemperiertes*, or *Well-tem-*

pered, *Clavier* (the usual English title *Clavichord* is a dangerous misnomer). More thorough than Fischer, he gave it preludes and fugues in each of the twelve major and twelve minor keys in the sequence C major, C minor, C \sharp major, C \sharp minor, D major, and so on. About twenty years later, around 1742, he wrote a similar cycle in a second part, so that the entire *Well-tempered Clavier*, nicknamed the Forty-Eight, goes twice through all the major and minor keys.

NOTATION of this age still clings to the diamond shapes of mensural notation but is essentially, including bar-lines, the script of our time. The stemmed white-note corresponds to the modern halfnote, and the stemmed black-note to the modern quarternote. The stemless black diamond has disappeared, and dotted groups are written out.

Nevertheless, the dotted notation of the time is a thorny problem to the modern musician who believes in the unequivocal meaning of symbols. To us, the dot implies a lengthening of the preceding note by a half of its value. Late in the seventeenth and early in the eighteenth century, its meaning was, on the contrary, far from certain. It could be what it is today; it could also, as in the slow introductions of French overtures, stand for the stronger form of lengthening that we denote by a double dot; and it could, though not compulsorily, give the first note two, and the following note one out of three units, to coincide with a triplet in the other hand in some keyboard passage (as often in works of Bach). There was no binding rule about the amount of lengthening, and the modern player, in reproducing music of that time, is free to do what he deems best.

Nor had the key signature around 1700 the logic and consistency of today. As a rule, there was a sharp or a flat less than we would expect: one flat for G minor, two flats for C minor, three sharps for E major.

One reason was that the signature was not meant to symbolize the key at first sight, but rather to save the trouble of a continual repetition of those signs which had to be used all the time.

Another reason was that, from the early Middle Ages on, the sixth in the first mode (Dorian)—*una nota super la*—had been flatted without adding the flat as a key signature. Accordingly, all minor scales, being identical with Dorian in their descending phase, were given a flat less than they have today: G minor had one flat, B, while the second flat, E, was, as the minor sixth, not put in the key signature. And this is why C minor had only two, and F minor, only three flats.

In a similar way, the sharp tonalities were given one sharp less than today. The *musica ficta* had admitted, and even required, the sharped 'leading' note without adding it to the key signature, since it was, properly speaking, against the key.

Not the least reason for such curtailing practice was the curious abhorrence of complicated key signatures in the sixteenth and seventeenth centuries. Even in the very simple case of B flat major, Morley's *Plaine and Easie Introduction to Practicall Musicke* of 1597 took offence at "the verie sight of these flat cliffes (which stand at the beginning of the verse or line like a paire of staires, with great offense to the eie, but more to the amasing of the yong singer)." Foreigners, he continues, put one flat only in the signature and add the other ones as accidentals at their proper places.

GRACES. Once more, the delicate subject of ornamentation must be touched upon. Once more, it must be emphasized that music, vocal and instrumental, and particularly that for keyboard, was 'bald' and lifeless without graces in a time that did not use shades of intensity to stress and enliven the notes of importance.

Grace notes, or, as the French said, *agréments*, were expected

from the performer as a matter of course, whether the composers took care—as did the French—to denote every single one of them by a special symbol or were—as in Germany—rather negligent in writing them down. The numberless graces in common use were mainly of two kinds.

(1) One kind of grace conveyed particular life and breath to some single note, such as the

Appoggiatura, in German *Vorschlag*, which was the accented touch on the beat (not, as today, the unaccented, fleeting touch before the beat) of a neighboring, non-harmonic note, to be slurred over to the note that the harmony actually required.

Mordent or 'biter,' a rapid, unrepeatd to-and-fro between the main note and one of its neighbors.

Trill, a continued prestissimo alternation of the main note and one of its neighbors, beginning with the latter.

(2) The other kind of grace smoothed the passage from note to note. Such were the

Turn, on which a group of notes—four or five—circled rapidly around the first note as if winding up for attacking the following one.

Tirata, or 'slur,' which softened a large melodic stride or leap by a slurring scale-passage from note to note.

Profuse ornamentation with graces is only a part of the glittering sound that music presented around 1700. While the harpsichord player was bound to his notes and only embellished them with *agréments*, the singers and players of melody instruments were required to dissolve their parts, in slower movements especially, into an uninterrupted flow of *coloratura*, similar to the diminutions in Palestrina's time.

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16

THE AGE OF BACH AND RAMEAU

1710-1750

THE FATEFUL YEAR 1685 gave birth to two egregious Saxons, Handel, February 23, and Bach, March 21, and to one Italian, Domenico Scarlatti, October 26. Two years earlier, the Frenchman Rameau had been born. In an incomparably short time, Providence had the leading actors ready to close the past and to open the future.

Two of these masters, Bach and Handel, were rather on the conservative side, Rameau and Scarlatti were pioneers.

JOHANN SEBASTIAN BACH, the son of a prodigious dynasty of Thuringian cantors, organists, and town pipers, was born in Eisenach at the foot of the Wartburg on March 21, 1685, lost his parents at the age of ten, and was reared in nearby Ohrdruf by an older brother, who tried in vain to bridle the youngster's dashing advance. He locked away a book with copies of 'great' music, by Froberger, Buxtehude, and others, which the eager boy at last secured and secretly re-copied by moonlight, only to have his manuscript confiscated upon discovery.

In 1700, Bach was sent away to finish his education at the *Gymnasium* of Lüneburg, Hanover, whence he occasionally

hiked to Hamburg for Jan Reinken's famous church music and to the little residence of Celle, Hanover, where an excellent French court orchestra made him familiar with the latest foreign style.

After three years in Lüneburg, he graduated and began the traditional life of a Thuringian musician. In 1703, he served for a short time in the ducal orchestra in Weimar, and in the same year as an organist in the church of Arnstadt. From there, he took—and overstayed—a leave of absence in Lübeck on the Baltic Sea, where, under the influence of Dietrich Buxtehude's church music, he changed his own style so much that on his return to Arnstadt he was taken to task not only for the neglect of his duty but also for his turgid playing, in which the congregation was at a loss to find the familiar chorale melody. In 1707, he became the organist at St. Blasius' in Mühlhausen, Thuringia, and married his cousin Maria Barbara Bach.

Only a year later, he entered the second phase of his professional career, which was to be spent in the service of Thuringian courts. He was court organist and chamber musician at Weimar from 1708 to 1717 and director of chamber music at the princely court of Cöthen from 1717 to 1723.

In 1723, he found at last a permanent home in Leipzig as the cantor, or director of music, at St. Thomas Church and School—with some Latin teaching thrown in—and also, later, as the director of music in the university. "At first," he wrote in a letter to a friend, "it was not wholly agreeable to me to become a cantor after having been a *Kapellmeister*, and for this reason I delayed making a decision for three months." Far from the worldly splendor of the great *Hofkapellmeister* and virtuosos, he led the provincial life of a good and honest family father in comfortable though narrow circumstances, and had two successive wives of a similar cast and twenty children, of whom only nine survived their father.

Bach was no pioneer, no beginner—his very sons turned away from him and sailed for coasts unknown. He was the

colossal summit of hundreds of years of musical energy—the polyphonic language in fugue and canon, the chorale cantata and the chorale prelude, Passion and Mass, suite, concerto grosso, and toccata reached in him their climax and ultimate fulfilment. But his art was not retrospective. The truly great men finish and crown—they do not repeat.

This climax coincided, in time and in spirit, with the final peak of the German Baroque. Bach's incomparably forceful expression, his urge to pile up structures of dimensions unheard-of in densest polyphonic weaving and a final unification are all typical of the closing Baroque in his country. And more so is his mystic absorption in things transcending reason. Through the often feeble, pompous, redundant words of Protestant poetry, he looked into the last, unutterable depths of religious awareness, and both in his nearly two hundred cantatas and in his chorale preludes, which freely widened and deepened the Sunday's chorale on the organ, he gave expression to religious wisdom at the eleventh hour, when the rationalism of the dawning Enlightenment was blocking its way.

Still, there is no unified Bach style. No easy formula can cover the riches of his work and his genius.

He crowned the mighty polyphony of the German Baroque in the forty-eight fugues of the *Well-tempered Clavier* (part I 1722, part II c. 1742) and those for the organ; in the breathtaking choral fugues of the *B minor Mass* (1733), in the canons of the thirty *Goldberg Variations* (1742) (called after a harpsichordist of this name), and in the last bequest of his pen, *The Art of the Fugue* (1750).

He amalgamated with his German heritage, the finely chased art of France in his *French Suites* for the harpsichord (1717) and also in the luxuriant ornamentation of his chorale preludes for the organ.

To Italian music he paid his respects in the numberless recitatives and *da capo* arias of his cantatas (AS 23, 61) and of the two Passions after St. John (1723) and St. Matthew (1729). He also did so in his concertos, in those of the grosso

form, as in the six *Brandenburg Concertos* for Christian Ludwig of Brandenburg (1721), and in those for one, two, three, and even four harpsichords with orchestra (AS 41, 42), and in the *Italian Concerto* of 1735, where he gave the solo and the accompanying *ripieno* to the two keyboards of the harpsichord. Indeed, he transcribed several of his harpsichord concertos from violin concertos of the Italian master Antonio Vivaldi (AS 37 and 38, where the two versions are juxtaposed), adding sevenths to the simple triads of the Italian master, giving greater importance and action to the basses, and sometimes dissolving the rigid lines of the original in sparkling fireworks.

But a few things in his work hint at the future to come. One of them, as in the *Italian Concerto* and the C major concerto for two harpsichords (AS 41), is the timid appearance of a second, contrasting theme, which was to play a decisive role in the sonata form of the 'classic' masters. The most striking anticipation of the future, however, seems to the present author to be the beautiful heartfelt melody of the *Brandenburg Concerto* in D major, which anticipates the characteristic *allegro cantabile* of the later eighteenth century, of his youngest son Johann Christian, and of Mozart himself.

In the forty-seven tomes of Bach's complete works—which, in view of many losses, are by no means complete—we find whatever forms the time provided: Masses, Passions, cantatas, and motets; suites, concertos, preludes, and fugues; sonatas and variations, toccatas and phantasies; from the freest, almost shapeless, rhapsodic forms of the latter to the strictest weaving of the fugue, from the miniatures of the *Klavierbüchlein* to the gigantic size of the Mass in B minor.

One form is missing, though—the opera. And his *Christmas Oratorio* is a cycle of cantatas rather than a real, dramatic oratorio of Handelian cast. It is therefore idle (as in most such cases) to discuss which one of the two was the greater master. Providence created both in one throw to allow each to follow his own genius and to join in an incomparable unity.

Here is a short survey of Bach's principal works:

ARNSTADT 1703-1707

Capriccio sulla lontananza del fratello diletto, 1704

MÜHLHAUSEN 1707-1708

Cantata Meine Seele rühmt und preist 1707-1710 (AS 23)

WEIMAR 1708-1717

Organ passacaglia in C minor

Organ toccatas

CÖHHEN 1717-1723

Brandenburg Concertos 1721 (commissioned by a Margrave of Brandenburg)

Chromatic Fantasia and Fugue

English Suites

French Suites

Inventions

Violin sonatas

Violin concertos

Well-tempered Clavier I 1722

LEIPZIG 1723-1750

Magnificat 1723

St. John's Passion 1723

St. Matthew's Passion 1729

St. Mark's Passion 1731

Clavierübung I 1731, II 1735, III 1739, IV 1742

Christmas Oratorio 1733-1734

B minor Mass (*Kyrie and Gloria*) 1733

Italian Concerto 1735

Easter Oratorio 1736(?)

Goldberg Variations for the harpsichordist Johann T. Goldberg 1742 (in *Clavierübung* IV)

Four Masses 1737-1740

B minor Mass (from the Credo on) 1738

Well-tempered Clavier II c. 1742

Musical Offering (*Musikalisches Opfer*) 1747

The Art of the Fugue (*Die Kunst der Fuge*) 1749

Six motets

Most cantatas

There are a few problematic instruments in the scores of Bach or else connected with his name: the *violino piccolo*, the *viola pomposa*, the *viola d'amore*, the *violoncello piccolo*, and several unusual trumpets and oboes.

The *violino piccolo*, prescribed in the first Brandenburg Concerto in *F* major, is a three-quarter violin tuned a minor third higher, and sharper in tone, than the usual violin.

The *viola pomposa*, often discussed, was very probably a viola with the *e''* of the violin as a fifth string.

The *viola d'amore* (or, in French, *viole d'amour*) was a modish instrument in viola size and *gamba* form, held and played like a viola, against the shoulder and with a palm-down bow. It had six or seven bowed, catgut strings in some triadic tuning, *A d f a d' f' a'* or otherwise, and, behind them, a set of delicate wire strings, which, taking up the vibrations of the bowed, gut strings, resounded 'sympathetically,' as the physicists say, made the tone fuller, and even gave it a silvery echo. The reader should, however, consult the author's discussion in *The History of Musical Instruments*, pages 364-367 with the illustration on page 364. This instrument, which had but a small, insignificant literature of its own, was mainly used for solos; it is a bad mistake, both historically and artistically, to cram it into some *gamba* ensemble of modern old-music performances.

The *violoncello piccolo* had the usual tuning but was, in size at any rate, smaller than the customary German 'cello, which served the purpose of duplicating the thoroughbass rather than that of solo playing.

The greatest problem has been the so-called *Bach trumpet*, which climbed high up in the range of ledger-lines—*e'''*. Modern performers play the delicate parts on extra-small, high-pitched trumpets and do achieve the most dangerous notes, to be sure, but, with a midget tube too short to provide a satisfactory timbre, deprive them of all their brilliance and charm. That in the time of Bach these parts were played—and probably well played—depended on other factors than shortness; we actually know that they were played on trumpets twice as long as the alleged Bach trumpets of our day. The most important of these factors was the strict division of labor in the "Knightly Guild of Trumpetists and Kettle-drummers," which allowed—

and forced—a *clarino*, or first-part player, to specialize all his life in the highest range, without ever spoiling the high-range adjustment of his lips by descending into the lower registers of *principal* trumpetists, which the modern orchestra trump-etist cannot avoid doing all the time. In such specialization, the player availed himself of a suitable mouthpiece with a very shallow basin and a broad, lip-supporting rim—not of the deeper, small-rimmed compromise mouthpiece of the modern trump-etist.

And then, the few highest, almost acrobatic parts in the scores of Bach were certainly 'tailored' for one or two out-standing virtuosos, just as operatic arias were written in those days for the personal abilities of individual stars.

A variety of the trumpet, used by Bach to double the chorale, was the *tromba da tirarsi*, or *corno da tirarsi*. The epithet meant 'to be pulled.' The mouthpiece had so long a throat that the instrument could easily be drawn out and in while playing, in order to produce those notes not yielded by overblowing.

The *corno* itself, usually called the *corno da caccia*, or 'hunter's horn,' was more or less what the French horn is today. Only, it was played by trumpetists, apparently on trumpet-like mouthpieces, and held bell up, the modern "pocketward" position being due to the later technique of stopping. The effect was therefore much gayer and brisker.

Finally, a few words may be added on two unusual oboes: the *oboè d'amore* and the *oboè da caccia*. Both had the pear-shaped, so-called *d'amore* bell—well-known from the modern *cor anglais*—which, on account of its narrow opening, softened the tone. The former instrument was an oboe in A; it was so much longer than the ordinary oboe that the fingerholes usually producing a C scale would yield an A scale instead. The *oboè da caccia*, being an oboe in F, was the ancestor of the *cor anglais*, or English horn. The inappropriate name 'horn' may find an explanation in the curious sickle form of some of the ancestral 'hunting' oboes (illustration on page 382 of the author's *History of Musical Instruments*).

GEORGE FREDERICK HANDEL (spelled Händel in German) was born in Halle, Saxony, on February 23, 1685, only twenty-six days before Johann Sébastian Bach and not far from his birthplace.

One might say that, in order to sum up the cyclopean work of Baroque music, Destiny had to create two giants of equal powers, but of different and even opposed temperaments: one sedentary, firmly rooted in his native Saxony, the other a man of the world, at home in Halle, Hamburg, and Hanover, in England and Italy; one in constant friction with church and town and school authorities, the other wrestling with *castrati* and divas, with managers and audiences; one avoiding, the other seeking, the dramatic forms of the opera and the oratorio; one introvert and the other extravert, psychologists might say—which would be true as far as it goes.

Handel spent his early years in Halle. There he was given a solid training in organ playing and polyphonic writing. The important part of his career began at the public opera house of Hamburg in 1703, first as a violinist and later as a conductor and composer of four German operas. In 1706, he moved to Italy and had a complete success with Italian operas, oratorios, and cantatas. After less than four years, in 1710, he followed an invitation to conduct the music of the Electoral Court at Hanover, Northwest Germany, but took a leave of absence in the very same year to visit England and perform his opera *Rinaldo* in London. He came back all right, but went to London for good in 1712—against the will of his Elector, who, however, rejoined him there in 1714, somewhat unexpectedly, to be crowned king of England. Handel is said to have reconciled the embittered prince with an orchestral outdoor suite, the *Water Music*, performed on a barge next to the king's at a court gala on the Thames in 1715. Which is not true.

Handel did not re-enter the service of the court, although

he accompanied the king back to Hanover in 1716 and there wrote the last of his compositions in German, the *Passion* after a poem by Brockes. In England, he quietly worked for three years as a guest and chapel master of Duke Chandos—whence his two Chandos *tedeums* and twelve Chandos anthems. But from 1719 on, he was engaged in the management of opera houses in London and caught himself in an inextricable maze of cabals, rivalries, public opposition, singers' intrigues, and bankruptcy. Twenty years of a superhuman struggle led to a stroke and a palsy. He recuperated, however, and died only on April 14, 1759, seventy-four years old.

It is not gratifying to relate the details of his struggle. We had better turn our eyes to the time in which he created the works that made his name immortal, the English oratorios. Handel had tackled this form as a young composer in Italy. When he reverted to it in his fifties, he created an unprecedented type of music. Very far from Carissimi's devotional oratorio addressed to the congregation of an oratorio, Handel wrote for a large and nondescript, anonymous public and overwhelmed it with the epic grandeur of his Biblical heroes and the dramatic vigor of his choruses, with the size and weight of his means and the very dimensions of his scores. Indeed, the renditions of some of Handel's oratorios were among the earliest mass performances.

To list but a few of the outstanding titles, he wrote:

Israel in Egypt (1738)
Saul (1738)
Messiah (1742)
Judas Maccabaeus (1746)
Joshua (1747)
Jephtha (1751)

Besides oratorios, Handel left an enormous amount of *concerti grossi*, cantatas, and chamber music. Friedrich Chrysander needed one hundred volumes to publish his Complete Works, from 1859 to 1894, and yet they were not complete. AS has recorded an oboe sonata (No. 11), a gamba sonata (No. 49),

and a cantata for tenor *Look down, look down, harmonious Saint* (No. 70).

But both the oratorios and the chamber music have wrongfully overshadowed his dramatic work. From 1704 to 1740, Handel wrote no less than forty-six operas in the Italian language and in the lyrical style of Naples with the predominance of *da capo* arias. The best known seem to be *Ottone Re di Germania* (1723), *Giulio Cesare in Egitto* (1724), *Rodelinda* (1725), and *Serse, or Xerxes* (1738). One of the arias in the latter work has lived in an almost unparalleled popularity and in the disguises of all imaginable instrumental combinations as Handel's so-called *Largo*.

IT IS A STRANGE PICTURE, and a highly characteristic one, to see the German Handel writing Italian operas for the English. And if to this picture we add "the famous master of Italian music," Gluck, who, in his younger years, did the same thing in London, Copenhagen, and Vienna, and if, above all, we add Johann Adolf Hasse (1699-1783), the "dear Saxon," *il caro Sassone*, as the Italians called him, with his more than a hundred Neapolitan operas, we realize that the international triumph of this musico-undramatic form had come to its peak.

Still, a countercurrent is visible from about 1720 on. Around this year—we do not know the date of his first edition—Benedetto Marcello in Venice (1686-1739), the celebrated composer of fifty psalms, had a pamphlet printed, and later often reprinted, which, under the title *Teatro alla moda*, pitilessly satirized the poetic and musical weaknesses of the current opera pattern with its falsity and stilted pompousness.

This was criticism. But the stage itself reacted, too. The rising middle-class could not but feel frustrated when forced to attend the serious opera with its stale mythology and Graeco-Roman history, with its Armidas and Didos, Caesars and

Xerxes, with heroes and heroines, ideal characters, noble attitudes, theatrical pathos, and grandiose gestures. The public got fed up with a genre so far from reality, life, and the present day. After all, had they no right to relax, to understand, and to laugh?

As a way out of this crisis, the stage directors would interrupt the opera proper by some *intermezzo*, or 'in-between,' which was played act by act between the acts of the *seria*—a procedure quite unable to deepen the impression of the opera in any idealistic sense, but in return well able to reconcile the listeners with the tiresome duty of attending recitatives and *da capo* arias during the continual alternation of *seria* and *buffa*. The most famous example of an early comic opera, Giovanni Battista Pergolesi's *La serva padrona* (The Servant Mistress) of 1733, had been an *intermezzo*, before, shaking off the framework of serious operas, it became a *buffa* in its own right.

While the Italian *buffa* was an actual musical comedy, the *opéra comique* of the French was a play in which the spoken dialogue was interrupted by songs in the lighter vein with a definite accent on ridiculing the serious opera. After more obscure predecessors, this novel genre descended from Alain-René Le Sage's *Télémaque* in 1715.

In a similar spirit, England boldly opposed to the foreign, highbrow setting of the Italian court opera an entirely domestic, popular, catchy *ballad opera*. It had a number of simple songs in the lighter vein, but for the rest, it was spoken without any attempt at a recitative. John Gay, the poet, said in a preface of 1728: "I hope I may be forgiven, that I have not made my Opera unnatural, like those in vogue; for I have no recitative." The beginning was made in 1725 with Allan Ramsay's pastoral comedy *The Gentle Shepherd*. Not more than three years later, John Gay came out with his epochal *Beggar's Opera*, for which John Christopher Pepusch (1667-1752) had arranged appropriate melodies. With its musical hits and the open satire of a social and political character, it constituted a serious challenge to the musical plays of the court and a de-

cisive victory of the style *bourgeois*. Another ballad opera of the same year, 1728, Charles Coffey's *The Devil to Pay*, with music arranged by a certain Seedo, and his later *Merry Cobbler* (1735) became the fundamentals of the German *Singspiel* and will re-appear in the following chapter of the book.

THE SLOGAN STYLE *BOURGEOIS* leads us straight into the central problem of the time.

After the death of King Louis XIV in 1715, the heavy, majestic style of the declining Baroque gave way in two directions. In one, generally called the Rococo, majesty and heaviness were dissolved in light-footed elegance and light-hearted eroticism, albeit the courtly atmosphere and aristocratic spirit were kept. The other direction, for which there is no handy, adequate term, led to the province of the *bourgeois*, to honest simplicity, humanness, and stress on soul and sentiment.

In music, the Rococo was known as *le style galant*. The other way led to the realm of what we rashly and deceptively call 'classical' music.

Each style turned its back on the austere polyphonic language of the preceding generation. That Johann Joseph Fux in Vienna wrote his bible of counterpoint, the *Gradus ad Parnassum* (Steps to Parnassus), in 1725, with the definitive classification of the well-known five species, seems, as the publication of comprehensive manuals so often does, to indicate the end rather than the climax of that language.

Each style, on the contrary, strove for lightness and limpidity. And each put the stress on melody proper with little care for the bass-line and still less care for the voice parts in between. The musical style *galant* joined the architectural Rococo in its profuse decoration with grace notes; the style *bourgeois* dropped most of the graces except for the *appoggiatura*, which served its heartfelt expressiveness.

It is hard, if not impossible, to label the masters of the

time neatly as *galant* or *bourgeois*. They all draw inspiration and vitality from either side and attempt to fuse them in their own way.

The leader in France was Rameau.

JEAN-PHILIPPE RAMEAU was baptized at Dijon, Burgundy, on September 25, 1683, two years before Bach, Handel, and the younger Scarlatti, but he outlived them by several years, dying in Paris on September 22, 1764. Far into maturity, he earned his life as an organist in various churches, in Paris and elsewhere, until an influential protector enabled him to give most of his time to writing.

He was probably the greatest, and certainly the most influential, composer of France in the eighteenth century. Though he wrote religious music, too, the emphasis of his work was on operas, ballets, and pieces for harpsichord. AS 81 shows his ballet music, and AS 30 and 103, harpsichord pieces.

Rameau turned to the stage in 1733, when he was already fifty years old and Lully's most important successors in the field of opera and ballet, André Campra (1660-1740) and André Cardinal Destouches (c. 1672-c. 1749), had laid down the quill. (Cf. AS 96 and 86.)

Among Rameau's *tragédies lyriques*, or operas, *Castor et Pollux* (1737) and *Dardanus* (1739) have been the best known. The latter work was played till 1785. His main ballets were:

Les Indes galantes, 1735
Les Fêtes d'Hébé, 1739
Platée, 1745
Zaïs, 1748

Rameau's dramatic truth, equally far from the frigid pompousness of the older style and the pastoral playfulness of the

style *galant*, placed him in a no-man's land, before the French public was ready to chime in with the cry for the rights of the heart. In such a predicament, the weakness of his texts aggravated his difficulties.

Rameau's far-reaching influence upon the generations after him is probably due less to his scores than to an epocal *Traité de l'Harmonie* of 1722 (the year of Bach's *Wohltemperiertes Clavier I*), which, though bold and ingenious, contained a good many errors and inconsistencies that later writings of his pen had to correct.

In his approach, Rameau was a typical Frenchman of the eighteenth century, distrusting mere experience and imagination and calling in the all-powerful *raison*, which "is indispensable for any sane decision." Music "depends on reason, nature, and geometry" and is "a physico-mathematical science."

The gist of the *Traité* is the epochal recognition that those chords which we today call sixth and six-four chords are merely inversions of the triad in root position. For the rest, Rameau believed that the major triad was the basis of all harmony; it begot not only its direct inversions and, by addition, the seventh and ninth chords, but even the minor mode, which, mirroring the major scales in descending order, was in a way an inversion of the major. Since the conception of inverted chords implied a stress on the root, Rameau quite naturally formed the idea of what he called a 'fundamental bass' which—fictitiously—connected the roots of all the chords. It is necessary to mention this fictitious bass because the unprepared reader is prone to mistake it for the figured bass.

Harmony dominates Rameau's entire invention so much that his melody is often nothing but a broken chord. Hence, he complains that "music is ordinarily divided into harmony and melody although the latter is only a part of the other." And four years later, in a *Nouveau Système de Musique théorique*, he affirms "that melody stems from harmony."

DOMENICO SCARLATTI, Alessandro's son, was born in Naples on October 26, 1685, and died in the same city in 1757. As a disciple of his father, he wrote a few operas for Rome and also conducted the music at St. Peter's in Rome in his early thirties. But he spent the best part of his life as a harpsichordist in England, in Portugal (in the service of the king), and in Spain.

For his favorite instrument, he wrote many hundreds of sonatas in an entirely novel, progressive style. Good-humored and spirited, limpid and light-footed, they were short and free in form, changing in tempo, and thoroughly and exclusively harpsichordistic, with glittering arpeggios, audacious leaps, crossed hands, and other resources of keyboard technique. Any contrapuntal respect for individual voice parts had completely disappeared.

In this modern, anticontrapuntal attitude, Scarlatti found an important ally in the short-lived Giovanni Battista Pergolesi (1710-1736), whose universal fame was founded on the intermezzo *La serva padrona* (1733) and a *Stabat mater* for two women's voices, strings, and organ (1736), but who probably had a deeper influence with his trio sonatas for two violins, bass, and harpsichord. Nowhere is the turn to a new instrumental melody more obvious, to a cantability even in the faster movements, to contrasting themes, and to almost buf-fonic repartees.

IN GERMANY, the crisis of the Baroque style appeared in the works of a man even older than Handel, Bach, Rameau, and Scarlatti: Telemann.

Georg Philipp Telemann, born on March 14, 1681, in Magdeburg, Saxony, died in 1767 in Hamburg, where he had been Carl Philipp Emanuel Bach's successor as the director

of church music. He probably wrote more than any other composer, so much so that merely because of their number, he is not likely ever to have his complete works republished. At a rough estimate, there are, among his compositions, six hundred suites for orchestra, forty operas, forty-four Passions, and twelve complete annual sets of cantatas and motets for the Protestant service, not to mention his oratorios, his music for special occasions, and the gigantic amount of his chamber music.

Though much of this writing inevitably followed routine, his contemporaries considered him the outstanding German master of the time and far superior to Johann Sebastian Bach. He was, indeed, more 'modern.' However much he had been trained in the same tradition as Bach—"He could write a motet in eight parts as easily as someone else could write a letter," said Handel—he presently gave up his weighty German church polyphony for the fashionable style *galant*, and there he did so well that his famous chamber music collection of 1735, the *Tafelmusik* (of which the *E* minor quartet for violin, flute, 'cello, and harpsichord is recorded on AS 26) had an astonishing number of French subscribers.

His forms had changed little; thematic imitation is still the essential means of melodic weaving, and often enough one finds a true *fugato* in the bygone style. But the old solemnity and heaviness has disappeared; the melodic line is sprightly and gracious, and the instrumental ensemble, perfectly limpid. The thoroughbass, indispensable in the seventeenth century, seems already to be doomed; instead of doubling the harpsichord bass, the 'cello is often set free to join the melodic instruments, and, to avoid marring the texture, the harpsichord may be silent during several bars.

THE EMOTIONALISM inherent in the modern *empfindsame* style, which eventually led into an actual 'sentimental' style in the subsequent age, was heralded in un-

precedented forms of changing sound-volume as against the simple contrast of rigid fortes and pianos.

A *gravicembalo col pian e forte*, that is, a keyboard instrument that allowed playing softly and loudly by the mere pressure of the fingers, was the epochal, pregnant invention of the time. The new instrument, whose complicated original name was subsequently abbreviated to *pianoforte*, *fortepiano*, or even *piano*, was first designed in 1709 by a harpsichord maker in Florence, Bartolommeo Cristófori. The outer form was taken from the harpsichord, but the old jacks or springers with their plucking tongues were replaced by the complicated lever-action of our modern pianos, in which each key flings a hammer up against the strings and releases it to fall back to its rest position, before the finger leaves the key, by means of an automatic releaser, or *escapement*. The Metropolitan Museum has one of the two preserved Cristófori pianos, though its action is not the original.

Cristófori was the earliest and most excellent, but not the only, inventor of pianos. An English monk, Father Wood, in Rome, built one in 1711, perhaps upon hearing of Cristófori's invention; a Frenchman, Marius, in Paris, another in 1716; a German, Christoph Gottlieb Schroeter, in Saxony, a fourth in 1717. Their models were very different, but they agreed in allowing for an unlimited number of shades of intensity and a smooth passage between them. In a similar spirit, the English organ builders Abraham Jordan & Son devised in 1712 the earliest organ-swell by enclosing a group of pipes in a box which could be gradually opened or closed by a pedal. Representatives of an entire generation in the leading musical countries were at work to act against the older ideal of constant intensity.

At exactly the same time, Roman orchestras are said to have inaugurated as an unheard-of novelty, what today we take for granted: "the gradual diminution of tone little by little, and then returning suddenly to the full power," that is, not a *decrescendo* of single tones, as around 1600, but of phrases,

indeed of entire melodies. The Neapolitan opera composer Nicola Jomelli (1714-1774) brought the new technique to Stuttgart when he came in 1753 to conduct the orchestra of the Duke of Württemberg, and witnesses relate how the audience, fascinated, rose from their seats on hearing the swell of the orchestra.

The institution especially connected with the devices of gradually changing intensity and sudden fortissimi as means to stir emotion was the orchestra of the Count Palatine in Mannheim on the Rhine, reputed to have been the finest orchestra of the time—in Dr. Charles Burney's admiring words, "an army of generals, equally fit to plan a battle, as to fight it." A contemporary German poet, Daniel Schubart, wrote enthusiastically, "Their forte is like thunder, their crescendo a cataract, their diminuendo the rippling of a crystal stream, their piano, the soft breath of early spring."

Under the leadership of the Moravian Franz Xaver Richter (1709-1789) (whose *Larghetto* from a piano trio has been recorded in AS 56), of the great Bohemian Johann Stamitz (1717-1757), and, in Mozart's time, of Christian Cannabich (Mannheim 1731-Frankfurt 1798), the Mannheimers created the modern art of orchestral playing and conducting, and contributed to creating the modern symphonic style, of which the following chapter will outline the principal features.

It should not be assumed, however, that crescendo and diminuendo were altogether victorious. As late as 1748, the new practice was so completely unknown in France that Jean-Philippe Rameau, who needed it in his ballet *Zais*, was forced to describe it in a roundabout way: "Here, each instrument sets in, at first softly and then insensibly swelling to an extreme forte." Indeed, the most complete of German treatises on musical performance, the method of flute-playing by Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen* (first edition 1752 and last in 1789) dealt with the proper use of forte and piano on five full pages without so

much as mentioning *crescendo* or *decrecendo*. But then, the taste of Quantz, as Burney said in 1772, was "that of forty years ago."

ALL THIS EMOTIONALISM, as far as it went, was no longer 'Rococo' or *style galant*. Rather it was a decisive turn away from the cool atmosphere of high life and court to the warmer climate of the *bourgeoisie*, the middle class.

Perhaps the strongest, and certainly the strangest, contact of the dying Baroque and the dawn of the burgher age in music was Johann Sebastian Bach's amazing *Coffee Cantata*, in which the then still recent incursion of the stimulating drink from Arabia was given a perpetual monument in the form of a Protestant, German cantata with recitatives and arias. It is open to question whether the master paid a somewhat facetious tribute to the novel, burgher style by conferring upon it the pompous idiom of the church cantata and the *opera seria*, or whether, the other way around, he delighted in caricaturing his own style in all its majesty by laying the scene of this secular cantata in a middle-class party. Maybe, he sat comfortably down with a broad, good-humored smile to do both at one blow.

But in a deeper sense, the *Coffee Cantata* is even symbolic. Coffee parties in private homes—*salons*—and public coffee houses became debating places where musical currents and works were discussed when the burghers had assumed the responsibility for the arts that the courts and the Church were giving up.

The conception of music as a public affair was enhanced by the barely precedented rise of musical criticism as a profession. Critical columns were printed in Paris in the *Mercure de France* (1672-1825), and in London in *The Tatler* (1709-1711) and *The Spectator* (1711-1712), while in Hamburg

Johann Mattheson came out with a *Critica musica* (1722-1725) and in Berlin Johann Adolf Scheibe published *Der critische Musicus* (1738-1740) and Friedrich Wilhelm Marpurg, *Der Critische Musicus an der Spree* (1750). These German critical essays, printed in separate issues, were timid beginnings of music-magazine publishing. Germany continued with Lorenz Mizler's *Musikalischer Staarstecher*, or Musical Cataract Cutter, of 1739 and 1740, France with Abbé Marc-Antoine Laugier's *Sentiment d'un Harmoniphile sur divers Ouvrages de Musique* (two numbers), and England with *The New Musical and Universal Magazine* of 1775. All these attempts were short-lived.

In organizing public concerts, the Londoners had taken the lead some decades before (cf. page 255). Germany and France followed in the time of Bach and Rameau. In 1713, Telemann founded the *Wöchentliche Grosse Concert im Frauenstein* at Frankfurt-on-the-Main, and in 1720, a similar institution in Hamburg; shortly after, on March 18, 1725, Anne Philidor—a man!—established the famous *Concerts spirituels* in the Tuileries at Paris. The earliest American concert on record was given in 1731 at Boston, without, however, becoming a regular institution. In Vienna, on the contrary, no public concert existed before 1740.

THE INSTRUMENTS were still led in the North by the organ. But it was no longer the organ of Praetorius. Gottfried Silbermann in Freiberg, Saxony, and his fellow builders unified and dimmed the glaring colors of its stops, but gave them transparence and a silvery lustre. The stress went down from strident four- to the more majestic eight- and sixteen-foot registers, from denser mixtures to slender solo stops, from jarring reeds to milder labial pipes.

A more decisive change, however, took place in the fields of

stringed and wind instruments, above all in Italy and in France.

Antonio Stradivari of Cremona, the world's greatest maker of violins, died in 1737, almost a hundred years old, and two other masters of Cremona, Carlo Bergonzi (d. 1747) and Giuseppe Antonio Guarneri "del Gesù" (1687-1747) held the standard for a few more years before decline set in.

However, this highest peak was not the ultimate phase of violin making. Even the most precious and best preserved instruments of the Stradivari generation have since been submitted to important alterations which have changed their tone. The neck has become longer by about a quarter of an inch in order to facilitate the modern technique of playing in higher 'positions' of the hand, that is, of shifting the stopping hand way up on the fingerboard in the interest of a higher range. Moreover, the playing plane has been slanted by wedging up the fingerboard to slope away from the body and, consequently, by heightening the flatter bridge of the originals. Lastly—not to mention changes in the strings—the bass-bar, a slender ledge inside, below the G string, resisting the pressure from above and increasing the tension of the soundboard, proved to be too short and too weak in times of a rising pitch and was replaced by a longer and stiffer bar (plate XVI).

While decadence set in both in its homeland and in Germany, the violin, although of old standing in dance and operatic orchestras, had not yet been recognized even as a chamber or solo instrument in France. As late as 1740, Hubert le Blanc, a lawyer, thought it necessary to publish a bellicose *Défense de la Basse de Viole* [the gamba] *contre les Entreprises du Violon et les Prétensions du Violoncel*. When the famous violinist Jean-Marie Leclair died in 1764, the leading magazine, *Mercure de France*, stated in a eulogy that the violin owed its acceptance by "decent people" only to the deceased master. Not before the early nineteenth century did France have any violin maker of rank.

Together with the decline of the viols and the final rise of the violin family, the time witnessed the decline of the recorders and the final rise of the transverse or cross-flute. Both events were unmistakable symptoms of a change from cool reserve to a more and more emotional style. The French had long ago given up the *flûte douce*, or recorder, and led the modern composition for cross-flute to an early peak in the sonatas of Michel Blavet (1700-1768)—of which AS 9 gives an example—when Bach still meant the old recorder wherever he wrote simply *flauto* and did not expressly prescribe the *flauto traverso*. As late as 1752, the leading flute-pedagogue, Johann Joachim Quantz in Potsdam, saw fit to call the instrument distinctively a *Flöte traversiere* on the title page of his famous *Versuch einer Anweisung* etc.

The time also put an end to the long career of the lute, even in Germany, its greatest stronghold. The instrument was costly to keep and difficult to handle. More than a hundred years before, John Dowland had said that as the lute “of all instruments that are portable is, and ever hath been most in request, so is it the hardest to manage with cunning and order, with the true nature of fingering,” and Bach’s friend Johann Mattheson once said that a player eighty years old must have wasted sixty of them in tuning. Unassuming songs were just as well accompanied on the simpler guitar, and elaborate solos found a more proper place on clavichords, harpsichords, and pianos. When, shortly after 1750, the thoroughbass was at last given up, the lute lost any reason for being and disappeared.

THE PITCH of the time was generally lower than today. Between 1720 and 1730, Italy had an $a' = 395-404$ vibrations per second, which, compared with our 440 v., was 187-148 cents (cf. page 15 f), or approximately a whole- or a three-quarter-tone, lower. Germany’s pitch was slightly higher;

two organs close to Bach's time and home had 415 and 420 v., they were 102 and 81 cents, or approximately a semitone, lower.

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LISTENING: AS 8, 9, 11, 23, 24, 26, 30, 33, 37, 38, 41, 42, 48, 49, 61, 64, 70, 74, 76, 81, 84, 86, 90, 96, 100, 103, 105, 106. 2000 Y 10-12.

17

THE AGE OF HAYDN AND MOZART

1750-1791

WHEN JOHANN SEBASTIAN BACH died in 1750, the novel trends had reached maturity in all the fields of art. Wherever the masters tried to say in words what they thought the goal should be, they spoke, again and again, of nature, simplicity, passion. These slogans were heard in the creeds of architects, sculptors, and painters, in the critical columns of the leading magazines in Paris, in the *drama bourgeois* and the *comédie larmoyante*; they were heard when the French ballet-master Noverre attacked the lifeless, stiff ballet of yore; and they appeared when the moderns fought for the rising waltz against the punctilious minuet.

IN THE OPERA, the three slogans—nature, simplicity, passion—appeared with greatest authority in the reform of Gluck.

Christoph Willibald Gluck was born as the son of a princely huntsman in a village of Bavaria (*not* Weidenwang) on July 2, 1714, the year of Carl Philipp Emanuel Bach's birth. The scope and circumstances of his early education are unknown. After a few years of irregular musical studies and ac-

tivities in Prague and Vienna, he found a protector who took him to Italy to learn his craft from one of the greatest teachers, Giovanni Battista Sammartini in Milan; and soon he found himself engaged in writing an amazing number of Italian operas in the usual Neapolitan style. His success was so complete that he was invited to England in 1745, and a little later to Germany, Denmark, and Austria. In 1750, he married, and settled for good in Vienna, and in 1754 was appointed Imperial *Kapellmeister* without conducting duties. On the whole, he lived as a free man, able to travel abroad wherever his presence was desired. His repeated stays in Paris in the 1770's were the most significant: his later operas played so important a role there that the French consider him almost as one of their own composers. On November 15, 1787, a stroke felled him in Vienna.

Gluck's universal fame is founded on his later operas, of the 1760's and 1770's, and on the reform of the musical stage for which they stand. It is only fair, however, to acknowledge that he was by no means a preacher in the wilderness. The composer Tommaso Traëtta (1727-1779) in Parma tried in a similar way to renew "the miracles of that art which the Greeks so much prized"; the Vienna of Count Durazzo, manager general of the opera, was wide open to a change of course; and Paris, the second homestead of the reform, had never been a stronghold of Italian opera, even though one party of opera fans played off the typical Italian Nicola Piccini against the reformer Gluck.

And it is also fair to acknowledge that Gluck's librettist of the 1760's, Raniero Calzabigi (1714-1795), rather than Gluck himself, was the motive power in fighting the pattern of Naples and leading the opera back to the dramatic spirit of 1600, indeed to the ideals of Lully: once more, the drama should be paramount, and music for the sake of music must not be allowed to interfere with the action on the stage or to attract attention in its own right. Rather was it the duty of music to

express the characters and emotions of the *dramatis personae* with the strongest intensity without dwelling on beautiful but antidramatic arias. Thus, "I begged him," wrote Calzabigi, "to banish *i passaggi, le cadenze, i ritornelli* and all the Gothick barbarous and extravagant things that have been introduced into our music"—an admonition that only those can fully appreciate who know to what incredible extent the celebrated singers distorted and diluted the original melodies with chains of scales and trills so insipid and empty that the driest finger exercises of Czerny appear imaginative in comparison.

Gluck himself, who gave the credit to Calzabigi, professed the same ideals, although the words he signed with his name might have been written by his poet. In the preface to his opera *Alceste*, printed in 1769, he wrote: ". . . I have striven to restrict music to its true office of serving poetry by means of expression and by following the situations of the story, without interrupting the action or stifling it with a useless superfluity of ornaments. . . . I did not wish to arrest an actor in the greatest heat of dialogue in order to wait for a tiresome ritornello, nor to hold him up in the middle of a word on a vowel favorable to his voice, nor to make display of the agility of his fine voice in some long-drawn passage, nor to wait while the orchestra gives him time to recover his breath for a cadenza. . . ." (transl. by Eric Blom).

His contemporary Charles Burney, a British musician who published diaries of two round-trips to the continent under the titles *The Present State of Music in France and Italy* (1771) and *The Present State of Music in Germany, Netherlands & United Provinces* (1773), could rightfully say: "He aspires more at satisfying the mind, than flattering the ear. . . . It seldom happens that a single air can be taken out of its niche, and sung singly, with much effect; the whole is a chain, of which a detached single link is but of small importance."

This is indeed the spirit of Gluck's reform operas of the 1760's and 1770's, namely:

Orfeo ed Euridice (Vienna 1762) in Italian, with an alto castrato as Orpheus

Alceste (Vienna 1767) in Italian (Paris 1776) in French

Paride ed Elena (Vienna 1769-70) in Italian

Iphigénie en Aulide (Paris 1774) in French

Orphée et Euridice (Paris 1774) a French revision with a tenor as Orpheus

Armide (Paris 1777) in French

Iphigénie en Tauride (1779) in French

One should add the ballet *Don Juan* (Vienna 1761) in which, very far from the earlier ballet *divertissements* with their meaningless poses and *pas*, the master created an actual dance-drama in the sense of the ideal, pantomimic ballet that the French revolutionary dancing-master Jean-Georges Noverre postulated in his famous *Lettres sur la Danse et les Ballets* at exactly the time at which Calzabigi and Gluck were turning to an actual music-drama.

Gluck wrote—apart from some church music, odes, and chamber pieces—no less than a hundred and nineteen dramatic and semidramatic works.

A few among the hundred and seven real operas are French comic operas written for the court of Vienna, such as *Le Cadi dupé* (1761) and *La Rencontre imprévue*, or *The Mecca Pilgrims* (1764), which led directly to Mozart's *Abduction*. The existence of these delightful plays shows that princes and noblemen, too, could be honestly bored when the heroes were stiltedly singing their arias and deploying their magnanimous characters, and that the movement away from the *seria* was no longer *bourgeois*.

In Paris, the rift between the two genres and the factions that backed them came into the open when the unprecedented success of Pergolesi's *Serva padrona* in 1752 incited the hot headed *Guerre des Bouffons*, or War of the Comedians, between the adherents of the traditional serious opera around the king and the enthusiasts of the comic opera around the queen—a battle fought with passionate pens and clever intrigues at court and elsewhere.

Since one of the slogans in this war was 'natural' versus 'learned' music, it was only logical that an amateur played a momentous role in the life of the *opéra comique*—Jean-Jacques Rousseau, the glory of literary France.

Rousseau's *Devin du Village*, or *Village Seer* (1752), had an incredible, lasting success, although, or because, the plot and the music are, to say the least, rather simple. Shepherd Colin forsakes shepherdess Colette; the fortune-teller promises to help her, and on his advice Colette, playing the flirt, tells Colin that she is in love with a city gent. The ruse succeeds, the lovers are reconciled, and everybody is happy. The subject is so meager that Colette's four airs (AS 54) practically summarize the play. The music was in the lightest vein, artless, and even amateurish.

Rousseau found two early, superior successors in Pierre-Alexandre Monsigny (1729-1817), whose many works, and particularly *Le Déserteur* (1769), assured the first enormous popularity of the French *opéra comique*, and in the Belgian André-Ernest-Modeste Grétry (1742-1813), whose *Caravane du Caire* (1784) was performed more than a half a thousand times. Indeed, Grétry's *Richard Coeur-de-Lion* (1784) is still on the repertoire of theaters in Paris.

Rousseau sought another, less successful solution of the dramatic crisis in the *melodrama*. The word should not mislead; the reader must not think of the sweetish, sentimental connotation of the modern English word melodramatic. The original melodrama of the eighteenth century was, quite to the contrary, a genuine drama in which one single actor (*monodrama*) or two actors (*duodrama*), not more, recited their roles in the voice of ordinary speech, since singing was after all not a naturalistic expression fully to the taste of a naturalistic age. An accompanying orchestra contributed those traits that only music can give, the hidden depth of the soul beyond man's actions and words.

After some attempts by earlier men, Jean-Jacques Rousseau, once more, set out as a pioneer. The monodrama *Pygmalion*

of 1762 became the paragon. Georg Benda, Kapellmeister to the ducal court of Gotha, Thuringia, found the work important enough to make and publish a piano score of it, and, having done so, he wrote himself two melodramas, musically better and more successful than Rousseau's: *Ariadne auf Naxos* (1775) and *Medea* (1778).

After its early triumph, the melodramatic form was not often revived, but was never forgotten either. Its history stretches from the prison scene in Beethoven's *Fidelio* to Richard Strauss' *Enoch Arden* (1898), Arnold Schoenberg's *Erwartung* (1909) and *Pierrot Lunaire* (1912), to Honegger's *Roi David* (1923), and Stravinsky's *Persephone* (1934).

While the German melodrama hailed from France and Rousseau, the German comic opera, or, as they called it, the *Singspiel*, went back to the two English attempts of Charles Coffey: *The Devil to Pay* (1728) and *The Merry Cobbler* (1735). The former, far more successful, was first translated by the German ambassador to London, von Brocke, and publicly performed by a caravan troupe at Berlin in 1743. Nine years later, in 1752, Christian Felix Weisse remodeled the text of the two operas, and a little-known musician, Johann Standfuss, wrote a new score. Not before 1766 did the laborious process of assimilation come to an end, when Johann Adam Hiller, a leading figure in the concert life of Leipzig (1728-1804), replaced Standfuss' music by melodies of his own. From then on, the destiny of the German *Singspiel* was secured.

Hiller, like Monsigny in France, concentrated on composing *Singspiele* in the sixties and seventies and had a similar tremendous success, particularly with *Die Jagd*, or *The Hunt* (1770), which was so full of life and dash that two generations later, Hiller's last successor, Albert Lortzing in Berlin (1801-1851), saw fit to re-adapt it to the then modern stage. Charles Burney, travelling through Germany, was impressed by Hiller's popularity: "His music was so natural and pleasing that the favorite airs, like those of Dr. Arne in England, were sung by all degrees of people; and the more easy ones had the honor of

being sung in the streets." A certain number of tunes today mistaken for German folksongs were indeed composed by Hiller and his followers.

The delight in *Lieder*, deeply rooted in Germany, was greater than ever in the time of the *Singspiel*. The ideals of nature and simplicity that opposed the *Singspiel* to the Italian *opera seria*, also opposed the domestic simple *Lied* to the formalistic *aria* in Italian style.

The earliest center of German *Lied* composing, the so-called First School of Berlin, included outstanding masters like Carl Philipp Emanuel Bach and Carl Heinrich Graun, but hardly rose above the level of rationalistic, pedantic dryness. Only around 1780, in the so-called Second School of Berlin, another North German composer, Johann Abraham Peter Schulz (1747-1800), was able to create a kind of *Lied* in which, in all simplicity, justice was done to the poetical mood of the text in anticipation of Schubert.

The flight into utmost simplicity, manifest in all the *Singspiele* and *Lieder*, led to the ultimate goal of reaching the world of the children in songs that the little ones were able to grasp, to enjoy, and even to sing. Johann Adam Hiller printed actual *Kinderlieder*, or Children's Songs.

Meanwhile, the English glee (from Anglo-Saxon *glēo*, 'music') became a well-bred successor to the naughty *catch*. It was a short and secular song for amateurs in three or more men's solo voices (alto, tenor, basso) without instrumental accompaniment. Samuel Webbe (1740-1816) and Richard J. S. Stevens (1757-1837) seem to have been its greatest representatives.

The numberless modern glee clubs go back to an original Glee Club, which met in a private house in London from 1783 on to sing a *cappella* ensembles after dinner—catches and glees, madrigals, motets, and canons.

THE SERIOUS CRISIS of the mid-century is reflected in the strange development of two of the sons of Bach, Carl Philipp Emanuel and Johann Christian.

Carl Philipp Emanuel, third of the sons of Bach, was born in Gluck's year, 1714, at Weimar, Thuringia, and died in 1788 at Hamburg. He spent twenty-nine years of his life (1738-1767) in or near Berlin, almost all the time as a chamber-musician to King Frederick the Great of Prussia—whence he has sometimes been called the Berlin Bach—and the remaining twenty-one years as the director of music in the six principal churches of Hamburg—whence he has been called also the Hamburg Bach. Few musicians of the eighteenth century exerted an equally strong influence; 'Bach,' to his contemporaries, was Philipp Emanuel, not Johann Sebastian, and Mozart said of him, "He is the father, we are the boys."

Philipp Emanuel wrote twenty-two Passions, two oratorios, many cantatas, chamber music, and odes. But most of his works were dedicated to his beloved clavier, a term that, in principle, covered all keyboard instruments, but, by preference, the clavichord. He gave it more than two hundred short pieces, and a great number of sonatas in three movements, among them the 'Prussian,' the 'Württemberg,' and the Sonatas for Connoisseurs and Amateurs (*Sonaten für Kenner und Liebhaber*). And when, in 1781, he had to part with his dearest Silbermann clavichord, he said farewell in a deeply moving rondo, which gives an idea of his famous improvisations and anticipates the style of Beethoven's earlier sonatas (AS 24).

In this amazing affinity to a master almost sixty years his junior, he concluded a musical life that had begun in the strict polyphonic training of his father and had passed through the opposite ideals of the style *galant*.

JOHANN CHRISTIAN BACH differed from his father more than the other sons—in character, life, and musical style. The youngest son of Johann Sebastian and Anna Magdalena, he was born on September 5, 1735, when his father was already fifty years old. After the father's death, fifteen years later, the youngster was educated in Berlin in the house of his stepbrother Carl Philipp Emanuel, who was his senior by twenty-one years. At the end of four years, he left Berlin and turned to Italy, to become a pupil of the most celebrated music teacher of the time, Padre Giambattista Martini in Bologna.

Johann Christian Bach's Italianization was rapid and thorough. The son of the greatest musician of the German and Protestant world turned Catholic, became the organist of the cathedral in Milan, and was much sought after as a composer of genuine Italian operas. To sharpen the contrast, this son of a sedentary man who had never left his native Germany and seldom the Saxo-Thuringian land, was too restive to stay in his adopted country and left in 1762 for London. The so-called 'Milanese' Bach became the 'English' or 'London' Bach. He became music master of the young queen, Charlotte Sophia, but the focus of his life and interest was in the public subscription concerts, of which he became the most prominent figure. After twenty years in his last homeland, he died on January 1, 1782.

Two events in his English career were particularly momentous. The earlier was the visit of the Mozart family in London. We know that there, in 1765, Wolfgang and his sister played a composition for four hands on the harpsichord, and that this combination of two players on the same keyboard was a novel treat, although it was known to the Elizabethan virginalists. Johann Christian subsequently published quite

a number of sonatas "for two performers on one pianoforte or harpsichord." Did the master learn from the boy?

It is more important, however, that Johann Christian made a deep, indelible impression on the eight-year-old boy with the melodious *cantabile* style which seems to anticipate the best and most essential of Mozart's language. Two recordings of AS, a charming quintet in *D* major for flute, oboe, and strings (AS 50), and a sonata for piano in *E* flat major (AS 68) convey a good idea of the beauty of his writing.

The second event in Johann Christian's English career was the earliest concert given on a piano, to be mentioned anon.

His quintet also interests us from another viewpoint: the two first editions have a figured bass, but the third edition does without figures. The middle voices, entirely neglected in the preceding style *galant*, became once more so vital that the harpsichord with its filling chords could be dropped from orchestral and chamber performances. This implied another important change: since the harpsichord withdrew from the orchestra, the conducting harpsichordist yielded time-beating to the leader of the violins.

At the same time, composers of *Lieder* began to write out the full accompaniment of the piano instead of a mere figured bass. Mozart's *canzonetta* of the early 1770's on AS 93 is a good example.

BOOTH SONS OF BACH represent an age that tried not only to be simple and natural, but also to show emotions that shortly before had been restrained or playfully steered around. Emotion was not, as in the age around 1700, confined to heroic passion or to religious absorption; on the contrary, it admitted with equal rights the unheroic moods of the *empfindsame* soul, of its melancholy, sentimentalism, and tearfulness, and it carried their expression far beyond the timid beginnings in the generation before.

It was not the emotional trend or *affect* itself, but rather the often pedantic rationalism of the time that tried here and there to classify carefully and treat the intangibles of 'passion' according to the recipes of an *Affektenlehre*, or Theory of Affects, of which we still have some leftovers in the alleged characteristics of major and minor and of the keys, such as the 'heroic' quality of *E* flat major, though the *Eroica* sounded actually in *D* when Beethoven performed it.

Affect, melancholy, sentimentalism, and tearfulness were the soil in which the *musical glasses* thrived. This name denoted sets of drinking cups, tuned by means of a greater or lesser amount of water and rubbed along their rims with wet fingers, in melodic sequence. In the immaterial vagueness of their tones, which transported the listener and carried him to the land of blissful dreams, they complied with the mood of the time so well that even as grave a man as Gluck condescended in 1746 to entertain his audience in the Haymarket Theatre in London with "a Concert upon Twenty-six Drinking Glasses, tuned with Spring Water, accompanied with the whole Band."

Indeed, Benjamin Franklin, who was, around 1760, the representative of Pennsylvania in London, found it worthwhile to convert the primitive device into a carefully fashioned *glass harmonica*. The player, sitting at a stand not unlike a sewing machine, touched the rims of glass bowls fitted into one another on a horizontal axle so that only the rims were accessible, while the foot was on a treadle to keep the axle rotating.

No wonder that another ethereal instrument became a favorite, too—the *aeolian harp*. A fancy contraption for romantic dreamers, it consisted of a framework with a number of thicker and thinner gut strings which, placed on a roof or in a window, sounded under the impact of the wind and united in mysterious, ever-changing chords—airy, bodiless, floating in the infinite. The changing was caused by the harmonics—more or less—that the varying force of the wind generated.

Symptomatic as the glass harmonica and the aeolian harp might be, the two sentimental contrivances moved on by-ways

rather than on the main road. The truly essential conflict in the field of instruments rose among the harpsichord, the clavichord, and the piano.

While the harpsichord was still the leader in all the countries of the West, the sentimental, intimate character of German music in the age of *Empfindsamkeit* found a more adequate expression on the clavichord, which, though small both in size and in the range of its expressiveness, nevertheless allowed for an *espressivo* and even a *vibrato* that the rigid harpsichord could never grant.

A German poet of the day could sing:

*Sei mir gegrüsst, mein schmeichelndes Klavier,
Was keine Sprache richtig nennt,
Die Krankheit tief in mir,
Die nie mein Mund bekennt,
Die klag' ich dir.*

Johann Timotheus Hermes (1738-1821)

Hail, thou, caressing clavichord,
My wounded heart's distress,
That language does not know to word,
That never does my mouth confess,
May on thy strings be poured.

—transl. C. S.

And: "The one who dislikes noise, rage and fuming, whose heart bursts in sweet feelings, neglects both the harpsichord and the piano and chooses the clavichord," said the critic Christian Friedrich Daniel Schubart (d. 1791).

This affection was enthusiastically supported by the greatest of German keyboard players, Carl Philipp Emanuel Bach. And for some decades, the clavichord had, in Germany, a second bloom almost unique in history.

But no second bloom can last. The piano, in grand and square and upright forms, was recovering from the inertia in which it had existed since the days of *Cristófori*, half a century back (cf. page 278), and showed the world that delicacy of touch could be combined with power. An unheard-of thing

happened: Johann Christian Bach, brother and pupil of the greatest herald of the clavichord, gave the first piano concert at London in 1768 on a square instrument that J. C. Zumpe's factory had sold to him for fifty guineas. And in the same year, Mademoiselle Lechantre played the piano in the *Concerts Spirituels* of Paris. In vain, the English harpsichord-makers tried to rescue their age-old, menaced instrument by giving it a horizontal Venetian blind above the strings which, opened or shut by a pedal, produced a kind of forte and piano and even a modest transition between the two. The days of the harpsichord and, for that matter, of the clavichord too, were rapidly, irrevocably going.

PIANO MUSIC and other instrumental forms were conquering grounds never dreamed of before. Coping with the melodious flow of singing, instrumental music meant renouncing any intricate polyphonic weaving as well as the ties that had connected it with the dance. It aimed at cantability, even in rapid movements, and it became dramatic.

The leading form in which this happened was the *sonata*, a concept that covered not only the sonata proper for piano solo or for violin and piano, but also the usual forms of chamber ensembles, such as trios, quartets, and quintets, and even the symphony and the concerto.

This sonata has very little in common with earlier forms of the same name. It consists, as a rule, of four movements differing in character, tempo, and partly even in tonality:

A rapid first movement, often with a slow introduction (which it had inherited from the French overture).

A slow movement in the subdominant (lower-fifth key) or the parallel minor key.

A minuet, as the last remainder of the ancestral suite of dances, repeated after a more intimate *trio*.

A rapid last movement, often in *rondo* form (cf. page 232).

Properly speaking, only the first movement—sometimes, also the last—is written in what musicians call the sonata form. It begins with an ‘exposition’ of some energetic, masculine theme in the principal key, followed by a contrasting, tenderer, feminine theme in another, related tonality. In the eighteenth century, this exposition of the two themes had to be repeated; and subsequently, in a second section, its thematic material was playfully tossed about, until the first theme re-appeared triumphant in a ‘reprise’ and ended in a concluding formula or *coda* (Ital. ‘tail’). The playful section between the exposition and the reprise, however, was slowly elaborated to form a ‘development,’ in which the themes, no longer treated as integers, were decomposed into characteristic fragments or motives which had sufficient motorpower to drive ahead. The theme no longer was; it acted.

The typically classical features—two contrasting themes and a repeated, symmetrical exposition—seem to have been an essentially Italian contribution. But the dramatic ‘development’ and the progress of the new instrumental style were almost exclusively German—for reasons that the present author has tried to show in his *Commonwealth of Art* (pages 380 f). The only non-German symphonist of the time was the Franco-Fleming François-Joseph Gossec or, in another spelling (and correct pronunciation), Gossé, who lived from 1734 to 1829, mostly in France, and excelled as the organizer of the *Concert des Amateurs* in Paris (1770), the re-organizer of the older *Concerts Spirituels* (cf. page 281), and the founder of the *Ecole Royale de Chant*, which later was transformed into the present *Conservatoire National de Musique*.

A freer style, in which the additive form of the older suite survived without the integration and dramatic urge of the sonata, was the *divertimento*, *serenade*, or *cassation*, a typically Austrian set of shorter movements (as in Mozart’s *Haffner Serenade* and *Kleine Nachtmusik*), generally in the lighter, though never vulgar, vein for small ensembles, to be played on festive occasions in private homes and parks.

THE MOST PROLIFIC composer of good *divertimenti*, with sixty-six scores, was Haydn.

But the *divertimenti*, retrospective and unassuming, were certainly not in the center of his work. Our interest is rather focused on his symphonies—a hundred and four at least—and on an incredible amount of chamber music in all imaginable combinations from fifty-two piano sonatas to duos, trios, quartets, quintets, and even a sextet.

In these compositions—more than in the works of any other man of the time—evolved the ‘modern’ mobile, driving style of writing: the sonata form with its dramatic ‘development’ which has just been described, the rehabilitation of fluent polyphony enlivening all the voice parts against the purely melodic attitude of the style *galant* with its lifeless middle voices, and even the delicate open-work technique in which a melodic idea leaps from part to part and leaves a rest in the just-abandoned part.

And it was in these compositions, too, that the symphonic and chamber-music forms, abandoning the older noncommittal playfulness, grew to the depth, dramatic power, and conflict of tragic passions which reached their climax in Beethoven. Even the most playful spot in the symphony, the minuet, lost its courtly, smooth connotations of elegant dancing and became a true, hobnailed Austrian *Ländler* along the back-to-nature line of the period. Good examples are Haydn’s fifth symphony of 1761 and, thirty years later, the Surprise Symphony.

In the face of so weighty an instrumental music, we easily forget that Haydn also gave us twenty-four operas, a number of Masses, and other vocal pieces both religious and secular, and that, two generations after Handel, he gave a fresh, momentous impulse to the oratorio in his *Creation* of 1798 and *The Seasons* of 1801.

The man who thus emerged as one of the greatest geniuses of the century led a modest life. Joseph Haydn was born in needy circumstances in a little town of Austria near the Hungarian border on March 31, 1732, sang as a chorister at St. Stephan's in Vienna, and subsequently eked out a scanty life with private music lessons and as an accompanist in Nicola Porpora's singing studio. During these ten years of uncertain living, he studied hard and tried his hand at instrumental composition, harpsichord sonatas first, a string quartet in 1755, and a few symphonies in 1759.

In 1759, twenty-seven years old, he began his career proper as a conductor of the typically Austrian and Hungarian house-orchestras, at first under Count Morzin and from 1761 on in the faithful service of the Hungarian Princes Eszterházy in Eisenstadt and Eszterháza.

He had been there ten years when his compositions began to assume a very personal character under the sway of the German Storm-and-Stress movement, which, laying emphasis on passion and individuality, tried to prevent the arts from sliding down into the levelling *genre bourgeois*. His main contributions of that time were the *Farewell* symphony and the *Sun* quartets of 1772.

When he published his *Jungfernquartette*, or 'Maiden' quartets, in 1781, he announced them as being written in a "new and special manner"—the 'development' had been born. The new conception had ripened when he created the six great *Paris* symphonies (1786), including *L'Ours*, *La Poule*, and *La Reine*.

The new turn in Haydn's life came in 1790 when his patron died and the orchestra was dissolved, although the master himself retained pension and title. Haydn was free. He left Hungary for good and moved to Vienna, but in the same year accepted John Peter Salomon's urgent invitation to perform his compositions in London. The invitation was characteristic of a decisive change in musical life: performances in private houses and with the essential coöperation of amateurs had

yielded for good to permanent professional concerts for paying audiences with a stress on great, international names as guests. Such was the nature of Salomon's famous concerts.

Haydn stayed in London from 1790 to 1792 and again from 1794 to 1795. There he wrote the famous twelve *London* symphonies Nos. 93-104, among them the *Surprise* (1791), the *Military* (1794), the *Clock* (1794), the *Drum Roll* (1795). (However, these twelve are also nicknamed *Salomon* symphonies, the name of *London* being reserved to only one of them.)

Haydn returned to Vienna as the grand master of symphonic music. But, though he had crowned his symphonic work, he was prepared to open new ways of expression. Under the deep impression of the English Handel-festivals that he had attended, he turned to choral music. From 1796 to 1802 he wrote his six great Masses, well known under the nicknames *Heilig, Pauken, Nelson, Theresien, Schöpfungs*, and *Harmonie Messe*. But above all, he turned to Handel's essential form, which had utterly degenerated, the oratorio. The two oratorios that he wrote around 1800 appear like lonely peaks in a plain: the *Creation*, or *Schöpfung*, of 1798, after Milton's *Paradise Lost*, and the *Seasons*, or *Jahreszeiten*, of 1801, on a poem of James Thomson's.

Not much later, his creative powers grew weak. He spent a peaceful old age in Vienna and died on May 31, 1809.

HOW DEEP THE CRISIS of instrumental music was and how uncertain composers and players felt at the time when Haydn's generation set forth on its pioneering work, appears from the astonishing fact that almost at the same time three excellent musicians, squeezed between a rapidly vanishing past and a timidly outlined future, sat down to write about correct performance. The titles, although longwinded and clumsy in the taste of the time, pretend that the books are

simply methods for flute, *clavier*, and violin. Johann Joachim Quantz, the teacher, chamber musician, and court composer of Frederick the Great of Prussia, published in 1752 a *Versuch einer Anweisung die Flöte traversiere zu spielen*, an Essay of a Method to Play the Transverse Flute; Leopold Mozart in Salzburg printed in 1756, the year of birth of his son Wolfgang, a *Versuch einer gründlichen Violinschule*, or Essay of a Thorough Violin Method; and Carl Philipp Emanuel Bach issued, from 1753 to 1762, a *Versuch über die wahre Art das Clavier zu spielen*, or Essay on the True Style of Playing the Clavier—"the school of schools," as Haydn said.

Actually, the three alleged instrumental methods were weighty, complete manuals of performance far beyond the provinces of their title-instruments, with all the intricate details of tempo, accents, intensity, accompaniment, grace notes, conducting, organization of orchestral ensembles and chamber music, and what not. No conscientious modern musician should fail to study these books. Without them, he will necessarily distort the whole of music between Bach and Mozart. Particularly in the field of grace notes, on which the melody of the eighteenth century depended to a degree almost inconceivable in our days, he cannot rely upon his notorious 'instinct,' the last excuse of ignorance.

A special interest should also attend the momentous attempt of Quantz to fix the average values of tempi by using a pulse beat of eighty per minute as the unit. To give a few interesting examples: the quaternote had:

MM 80 in the tempi *Allegretto*, *Allegro ma non tanto*, *non troppo*, *non presto*, *Moderato*

MM 160 in *Allegro assai*, *Allegro di molto*, *Presto*

MM 40 in *Adagio cantabile*, *Cantabile*, *Arioso*, *Larghetto*, *Soave*, *Dolce*, *Poco andante*, *Affettuoso*, *Pomposo*, *Maestoso*, *Siciliano*, *Adagio spiritoso*

MM 20 in *Adagio assai*, *Adagio pesante*, *Lento*, *Largo assai*, *Mesto*, *Grave*

In the dances of France, Quantz adds, there were basically two tempi only:

MM 80 for *Canaries, Courante, Entrée, Gigue, Loure, Sarabande*

MM 160 for *Bourrée, Chaconne, Furie, Gavote, Minuet, Passecaille, Passepied, Rigaudon, Rondeau, Tambourin*

Do not overlook the fast tempo of the Minuet. As a matter of course, however, all these indications are approximate and must not be taken too literally.

The moderate attitude of the French showed in their pitch no less than in their tempo. As a rule, the French preferred a low, the Germans a medium, and the English a high pitch. Nothing is known about the Italian pitch. The medium, German pitch—for which we have a tuning-fork of Mozart's, among other evidences—was $a' = 422-423$ vibrations per second, which, compared with our 440 vibrations, was from 68 to 72 cents, or approximately a third of a wholetone lower.

WOLFGANG AMADEUS MOZART led that rich and critical age to a peak.

He was born in Salzburg on January 27, 1756 and carefully brought up under the closest guidance of his father Leopold, who was a well educated violinist in the service of the Archbishop of Salzburg and the author of the aforementioned *Versuch einer gründlichen Violinschule*. As a child prodigy, the son was taken to Munich and Vienna in 1762, to Paris in 1763, to London in 1764, and to Italy in 1769. And the Germans and the French, the English and the Italians, received him with open arms, admiring the perfection of his harpsichord playing and the maturity of his compositions, and loving the warmth of his heart, his unassuming modesty, and his excellent manners. He himself, perhaps more than anybody else, could steadily widen his musical horizon in the closest

contact with foreign masters and styles in the leading countries of Europe.

His adult life did not keep the promises of his younger years. Unable to find any position to help him in earning his living, and equally unfit to cope with the cabals of stage and concert life, he created his wonderworks in ever growing poverty, died, only thirty-five years old, on December 5, 1791 in Vienna, and was buried in an anonymous common grave.

Without mentioning his earlier compositions, in which the Italian influence is particularly strong, we will confine ourselves to the principal scores of the last decade of his life, from 1781 to 1791.

In mentioning them, I must warn the reader that Mozart gave no opus numbers to his compositions. Their modern counting with a capital K, as K. 100, refers to Ludwig Köchel's *Chronologisch-thematisches Verzeichnis sämtlicher Tonwerke W. A. Mozarts* (1862), which was revised by Alfred Einstein in 1937 (1947).

Turning the pages of this portly volume, we are confronted with a tremendous, nay, unbelievable output for so short a life. It embraces all kinds of operas and cantatas, of symphonies and serenades, of chamber music, sonatas, *Lieder*, and Masses. Only a few among them are indifferent; an impressive number are incomparable landmarks:

Die Entführung aus dem Serail, in English, *The Abduction from the Seraglio*, a *Singspiel* on a text by Stephanie, 1781

Le Nozze di Figaro (*The Marriage of Figaro*), an opera *buffa* on a text by Da Ponte, 1785

Don Giovanni, a *dramma giocoso* on a text by Da Ponte, 1787

Die Zauberflöte (*The Magic Flute*), a German opera on a text of Schikaneder, 1791

The last year of his life yielded the unfinished *Requiem*, of which he wrote only the first half, up to the *Lacrimosa*, and left the completion to his disciple Franz Xaver Süssmayer. Let us add, as representatives of the large instrumental forms, the three great symphonies in *E flat major*, *G minor*, and *C major*

('Jupiter'), all written in 1788, and, as a representative of the smallest vocal forms, the Lied, *Das Veilchen* ('The Violet') on a text of Goethe's. It would be embarrassing to pick out a few characteristic examples from the incomparable riches of his chamber music, serenades, and concertos for piano, violin, harp, flute, clarinet, bassoon, French horn.

In all these works, we face an equipoise unique and beyond discussion. In Mozart's operas, music does not merely serve the drama without any right of its own, nor, on the contrary, is the action sacrificed to undramatic melodies or mere virtuoso technique. He did not renounce the beauty of well-wrought form for significance, nature, or character, nor did he immolate the truth of nature and character to empty, sensuous charm or ingratiating elegance. He did not hesitate to give his *opera buffa* all the wealth and weight of the *opera seria* or, the other way around, to ease the tension of tragedy. On his instruments he bestowed the soul and breath of human voices, so that the slower movements of his symphonies often look like arias, and the faster ones, like the spirited finales of operas. Again, he led his voices with the skill of the well-experienced symphonic composer. He was the never-surpassed poet of rounded, heartfelt, smiling melodies, and yet he knew when the iron discipline of strict polyphony was needed. In vain, you would look for the typical German in him, in vain for an adopted Italian. Reconciling beauty and character, German and Italian spirit, the tragic and the comic, drama and music, voices and instruments, melos and counterpoint, he was graced in a blissful moment of history to hold the scales of style in perfect balance.

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Instruments, New York, 1940: Chapter 17. Karl Geiringer, *Haydn*, New York, 1946. Johann Joachim Quantz, *Versuch einer Anweisung die Flöte traversiere zu spielen*, ed. Arnold Schering, Leipzig, 1906. Leopold Mozart, *Versuch einer gründlichen Violinschule*, Vienna, 1922. Carl Philipp Emanuel Bach, *Versuch über die wahre Art das Clavier zu spielen*, ed. Walter Niemann, Leipzig, 1920. Alfred Einstein, *Mozart, his character, his work*, New York-London, 1945. Curt Sachs, *The Commonwealth of Art*, New York, 1946: Cross Section 1760. LISTENING: AS 24, 44, 50, 54, 55, 56, 62, 66, 68, 83, 85, 87, 88, 93, 101, 102, 111-113, 117, 118, 119, 122-125. Many excellent commercial recordings of Haydn and Mozart.

18

THE AGE OF BEETHOVEN AND SCHUBERT

1791-1828

THE FRENCH REVOLUTION of 1789 found the arts all over the West in a turn toward strictest classicism. The architects were working on a Roman revival; feminine dresses were imitating the fashions of the earliest times A.D.; and Canova's statues, Louis David's paintings, and Goethe's dramas were drawing their inspiration and laws from antiquity. Music, though paying a short tribute to the nightmare of the Revolution in a few 'horror' operas, was, for the rest, united with its sister arts in a classicism that imposed the iron rule of balance, structure, and restraint upon expression.

Luigi Cherubini (pron. k-), a Frenchman of Italian descent (1760-1842), was the oldest master in the new classical line and one of the best, although the curse of short-lived existence, so common in the world of the opera, has buried in oblivion even his greatest masterwork, *Médée* (1797). But at least it should not be forgotten that the overture preceding this work set the pattern of the noble, heroic style that Beethoven led to a peak ten years later in his overture to the tragedy *Coriolan* (Op. 62, 1807).

LUDWIG VAN BEETHOVEN, scion of a Flemish family, was baptized on December 17, 1770, and born probably on the day before, in Bonn on the Rhine. Less

lucky than Mozart, he grew up in a rather dissolute house and, though from the age of eight prepared for a career as a wonderchild of Mozartian cast, was not given any general background. Only with the arrival of Christian Gottlieb Neeffe, who had been appointed organist of the Electoral court in 1779, did Beethoven find himself at last under the care of a well trained, open-eyed musician who, realizing the genius of the boy, gave him methodical lessons and got him positions as an assistant organist in the church, as a harpsichordist in the court orchestra, and as a viola player in the theater.

Nevertheless, when Haydn happened to stay over in Bonn on his way back from London, Ludwig decided to break away from the narrow conditions of the small, provincial residence and, twenty-one years old, moved in 1792 to Vienna, the new capital of the musical world, home of Haydn and Mozart. Mozart had been dead for some months. But Ludwig studied successively with Joseph Haydn, Johann Schenk, Antonio Salieri, and Johann Georg Albrechtsberger, and was well received in the palaces of music-loving aristocrats, whose names are known from the dedications of his works—Archduke Rudolph, Prince Lichnowsky, Prince Lobkowitz. Even his none-too-rare ill-mannered outbursts could never seriously disturb his friendship with the social elite, who sensed in him not only the matchless genius, but also the profoundly good, kindly, and noble character. Yet his life, alternating almost rhythmically between the city in the winter and the country during the summer and hardly ever interrupted by outer events, became increasingly lonesome with the progress of a fatal infection of his ears, which, first foreshadowed in his twenties, led to complete deafness before he was fifty years old. Still a bachelor, he died on March 26, 1827.

The years of boyhood excepted, he never held any of the positions at court or in a church that, till then, had supported the best musicians and in turn had exacted from them routine composing for daily consumption and often swift oblivion. More than any composer before him, he wrote only what an

inner urge enforced; and more than any composer before him, he waited for inspiration. It took him eight years, from 1815 to 1823, to finish the Ninth Symphony, and he composed no less than four different overtures to his opera *Fidelio* (II in 1805, III in 1806, I in 1807, all under the name of *Leonore*, and a fourth in 1814 under the name of *Fidelio*).

As a consequence, he left many fewer compositions than earlier men like Haydn or even Mozart, whose life had been so much shorter: one opera, *Fidelio*, against Mozart's twenty; two Masses, against Mozart's fifteen; one oratorio, *Christus am Oelberg* (1803); nine symphonies, against Mozart's forty-one or, including his *divertimenti*, seventy-two; one violin concerto, against Mozart's six. Each of these works is an entity in itself, momentous, weighty, unprecedented in earlier pieces and never repeated in years to come.

This personal way of creation brings Beethoven close, suspiciously close, to romantic ideals. And he has, indeed, often enough been claimed to be a romanticist—even by his romantic contemporaries. True, he found the subjects of his art deep in the personal experience of the heart; true, he used to describe his own confusion and conflict. Hence the many violent outbursts, brusque interruptions, and stubborn syncopations in which his works abound.

But in confessing the troubles of his soul, he never yielded to romantic sentiment or dreaminess. His art, as probably no music before him, hardly left the realm of a relentless struggle for character, strength, freedom, and ultimate peace. He was and remained the conqueror, the master of himself. In this purposeful, masculine attitude, he acted as a true classicist, raising the conflict in himself to the conflict of mankind, dissolving the individual in the general, and finding the way from the accidental and accessory to a last sublimation and essence. As a classicist, he did not allow any extramusical concept to interfere with the inner logic of music—even his almost programmatic Pastoral Symphony (No. 6, F major) was not intended to be descriptive; "rather an expression of feeling than

a picture," he defined it himself. But his inner logic was far from following conventional patterns; on the contrary, each one of his works has a form of its own. And, against and beyond the structural trends of his predecessors, he increasingly strove for the strictest integration, in which some work of gigantic size would develop from one melodic idea. The C sharp minor quartet (Op. 131, 1826) is a good example. And like Mozart, he drew, in his ripest style, quite close to Bach and embodied the most closely woven of forms, the fugue.

It has become customary to divide the work of Beethoven into three successive phases or 'styles'—a procedure helpful in orientation, but in its oversimplification dangerously deceptive. The current division is:

First Phase up to 1803, with the first two symphonies, the first three piano concertos, the *Pathétique* and *Moonlight* sonatas for piano, and the *Kreutzer* sonata for violin.

Second Phase from 1803 to 1815 or 1817, with the *Waldstein* sonata, the *Triple Concerto*, and the symphonies 3-8.

Third Phase from 1815 or 1817 to 1827, with the *Ninth Symphony*, the *Missa solemnis*, and the last quartets.

It is difficult, if not impossible, to single out the pieces of greatest importance and beauty from so exceptional a life-work. Conductors would point at his nine symphonies and at a couple of overtures—*Coriolan*, *Egmont*, the three *Leonores*, or *Fidelio*; pianists would think of five concertos of a truly symphonic cast and of thirty-two sonatas, among them the so-called *Emperor Concerto* in E flat major and the *Appassionata* in F minor (Op. 57, 1806); violinists, of his D major concerto (Op. 61, 1806), sixteen string quartets, and sonatas; and 'cellists, of five sonatas.

They all, however, agree on one important point: Beethoven's greatness becomes manifest in his instrumental music in whatever form, while his oratorio, *Lieder*, and other vocal compositions, excepting the *Missa solemnis* (1818-1823), are rather on the periphery of his (and of our) interest, although

the master called the voices in to climax his symphonic work with the solos and choruses at the end of the Ninth.

The seeds that Haydn had planted bore their ripest, ultimate fruit in Beethoven's symphonies. "The depth, dramatic power, and conflict of tragic passions" that the preceding chapter of this book has claimed for Haydn, reached their highest peaks in Beethoven's symphonies. Not that all his symphonies are 'profound.' Some are smiling, gay, and even playful. But these are fertile, idyllic valleys between the craggy, towering alps of the Third, or *Eroica*, the Fifth, in C minor, the Seventh, in A major, and the all-human, supra-human Ninth, in D minor.

The nine symphonies are:

- First, C major, Op. 21 (1800)
- Second, D major, Op. 36 (1802)
- Third (*Eroica*), E flat major, Op. 55 (1804)
- Fourth, B flat major, Op. 60 (1806)
- Fifth, C minor, Op. 67 (1808)
- Sixth (*Pastoral*), F major, Op. 68 (1808)
- Seventh, A major, Op. 92 (1812)
- Eighth, F major, Op. 93 (1812)
- Ninth, D minor, Op. 125 (1823)

The Nine—despite their greater freedom and size—continue and intensify not only the powerful significance that Haydn had given to his instrumental works, but also the characteristic sonata form of Haydn's with its dramatic 'development.' It was even in keeping with Haydn's transformation of the minuet as the third symphonic movement into a genuine Austrian *Ländler* (though still under the conventional name) that Beethoven dropped the inadequate name of the courtly dance and introduced the Italian title *scherzo* (pron. skertso) which allowed him to preserve the lightfooted three beats, but to free it from dance limitations and to make it now gay (as the name implies), now exuberant, now full of expectation.

In a similar way, the concertos and the chamber music followed in the wake of Haydn, to take the lead when the older

master laid down his pen. The concerto, once designed to show the virtuoso's brilliant technique without much care for 'content,' became in Beethoven's hands a symphony with solo piano or violin, which was no longer merely accompanied by the orchestra, but blended and vied with it as an individual behaves in a group. His chamber music started from the older concept of a noble parlor entertainment, but became increasingly meaningful and esoteric and culminated in three almost mystic quartets—in C sharp minor, in A minor, and in F major—of 1825 and 1826, which were beyond the comprehension of Beethoven's contemporaries.

In his one opera, *Fidelio* or *Leonore* (in three versions of 1805, 1806, and 1814), Beethoven wrote the drama of the faithful wife who, hiding her sex in a man's attire, has taken a lowly position in the jail where her husband is held as a political prisoner and saves his life from the assassin through her courageous intervention. Such breath-taking drama would have called for a heroic opera in the vein of Gluck. But the librettists, Joseph Sonnleithner and Georg Friedrich Treitschke, spoiled the work by drawing freely from the opposite styles of the French *opéra comique* and the German *Singspiel*. It was this unfortunate hodgepodge of the great and the banal, of the sublime and the ridiculous, that caused its failure and forced the composer twice to transform the original score.

THE OPERATIC SITUATION was sounder in France, where the styles were neatly kept apart. Gluck's grandeur was alive in the works of the organist Etienne-Nicolas Méhul (1763-1817), particularly in *Joseph* (1807), and in two earlier works of the Franco-Italian Gásparo Spontini (1774-1851), *La Vestale* (1807) and *Ferdinand Cortez* (1809). Spontini's later scores, however, like *Olympie* (1819) and *Nurmahal* (1821), written shortly before or during his twenty years as the Musical Director General of the Royal Opera in Berlin,

descended to a showiness with which the public slowly grew disgusted, until he was forced to quit his post in 1841.

Besides Mchul and Spontini, besides the masters in the wake of Gluck's heroic style, the French could boast of two accomplished masters in a lighter vein: Boieldieu and Auber. François-Adrien Boieldieu (1775-1834) had the curious fate that his two greatest successes were separated by twenty-five years, *Le Calife de Bagdad*, in 1800 (and still alive in its overture) and *La Dame blanche* (The White Lady) in 1825. Daniel-François-Esprit Auber (1782-1871), master of the graceful, lightfooted comic opera, achieved a lasting triumph in *Fra Diavolo* (1830).

The truly great, international success of the time, however, was *Il Barbiere di Siviglia* by a young Italian, Gioacchino Rossini (1792-1868), so truly international that only three years after its first performance in Rome (1816) it had already reached the stage in New York. Like the libretto of Mozart's *Figaro*, its text was taken from Caron de Beaumarchais' comedy *Le Barbier de Séville* (1732-1799), and Rossini wrote the music in the incredibly short time of thirteen days. The Barber was the last important work in the style of the older Italian opera buffa, with sweetish arias, brilliant coloraturas, and witty, catchy ensembles. And it was the very last one with a *recitativo secco*, or rapidly pattered recitative without accompaniment except for the dry and commonplace harmony of piano chords.

THE GERMAN OPERA, very far from the glittering, playful sensuousness of Rossini's scores, found an outstanding romantic master in Carl Maria von Weber (the von being his father's self-conferred knighthood). Born in December 1786, probably on the 18th, in Mecklenburg (although of an old family of Austrian musicians), he led the restless life of the stage, became *Kapellmeister* of the opera at Prague in

1813, and of the Royal Opera at Dresden, Saxony, late in 1816, where he also became the leader in a ten years' fight against the predominance of Italian opera companies in Germany. Forty years old, he died on a triumphal tour to London on June 4, 1826.

Weber wrote cantatas, choruses, *Lieder*, piano and chamber music. But the focus of his work was on the stage. Three of his operas deserve the attention of the world. The first, and in a way revolutionary, one is *Der Freischütz* (The Freeshooter), written in 1821 on a text by F. Kind as an ingenious blend of the simple, heartfelt *Singspiel* in the wake of Hiller and of the fairy-opera with all the romantic requisites of rustling German woods and hunting horns, of spooky nights and haunted glens, of the devil and magic bullets against the power of innocence, piety, and love—a play immortal in Germany, though little digestible abroad, where the magnificent overture, however, has a favorite place in concert programs. Richard Wagner was right when, at the master's reburial in Dresden in 1844, he said of him, "Behold, the Briton now is full of admiration, the Frenchman bows in praise, yet no one but the German can adore thee."

The second of the great three operas was *Euryanthe* (1823), on a text by Helmina von Chezy, typically romantic, too, in its dependence on supernatural forces, but turning its back on the simplicity of the *Singspiel* and its spoken dialogue, and in a way foreshadowing the world of *Lohengrin*. While consumption and ulcer of the larynx were shortening his life, Weber composed with a last, heroic effort the third of the great operas, for the Covent Garden Theatre in London—*Oberon* (1826), on a text of Planché after C. M. Wieland's poem, truly romantic, once more, and laid in a motley world of medieval chivalry and elves, of oriental glare and a magic horn.

Weber's concert, chamber, and solo music, showy rather than profound, is more or less forgotten. One piano work lives on, however, the *Aufforderung zum Tanz*, or Invitation to Dance, either in its original form or in one of its subsequent

orchestrations by Berlioz or by Felix Weingartner. The brilliant piece is remarkable as the earliest musical evidence of the novel Viennese waltz in its fiery tempo and dash with an exclusive stress on the first beat of the three—"the Viennese waltz surpasses everything in wild fury," says a contemporary—as against the many waltzes and *Deutsche* of the time, in which the weightier, hobnailed nature of the ancestral *Ländler* had not yet been discarded.

There is in all the works of Weber a remarkable contrast with the style of Beethoven. He is quite unconcerned with polyphony, symphonic development, or the problems of form. On the other hand, he has an astonishing *cantabile* in the popular vein (the word is meant in its best sense), and also in the higher realms of expression, though even there he takes his themes by preference from broken chords. Above all, he has the ability of the true dramatist to shift of a sudden from serenity to fear, from mirth to despair.

Weber would not have been a real romantic without a stress on the emotional atmosphere of sound as such, and, therefore, on the colorful language of harmony and orchestration. When in the *Freischütz* overture the serene quartet of the horns leads to the terrifying diminished-seventh chord of the tremolo strings with the fearful 'celli groaning above, the simple passage loses nothing of its gooseflesh effect on the listener.

Weber's name is also connected with an entirely unromantic by-way in the musical field. As a boy, he became interested in Aloys Senefelder's recent invention of 'lithographic' printing from plates of polished stone on which an artist had drawn with greasy ink or pencil. And Weber claimed to have improved it, for the benefit of music, to replace the costlier process of engraving. He was hardly fourteen years old, in 1800, when he lithographed his own *Variations for the Piano Op. 2*.

FRANZ SCHUBERT, the greatest romantic, died two years after Weber, and one year after Beethoven. His life had been tragically short and uneventful. He was born on January 31, 1797, in Vienna. His father was a school teacher, and his parental home, though poor, a meetingplace of serious musical friends and quartet players. At the age of eleven, he became, like Haydn, a choirboy, though in the famous Imperial Chapel in the *Hofburg*, or palace, not in St. Stephens's, and found an outstanding master in its conductor Antonio Salieri (1750-1825), who had also been one of Beethoven's teachers. After his mutation, he toiled for four years as an elementary-school assistant—but not in order to escape from military service, for which he was anyway too weak and too short; he measured less than five feet. Once more, his biography converged with Haydn's when, twenty years old, he accepted a short-lived position as a teacher in the Eszterházy family. He spent the short remainder of his life without any position, supported by the good will and the modest means of his friends, until, only thirty-one years old, he died on November 19, 1828. Upon his express desire, he was interred not far from the tomb of his idol Beethoven, who had preceded him a year before.

Although a faithful admirer of Beethoven, Schubert was in many ways his antipode. To the preponderantly instrumental imagination of the older master, he answered with a basically vocal attitude; to concentrated motivic elaboration, with broadly stretching, song-like melodies; to Beethoven's steely masculine energy and discipline, with an almost feminine submissiveness to the constant flow of inspiration. This yielding was romantic; and romantic, too, was Schubert's un-Beethovenian delight in the sensuous beauty of sound, in the characterizing force of modulating chords, in the juxtaposition of cheerful major and saddening minor. But above all, he was

a romantic in finding the gravitational center of his work in the *Lied*, for which he drew inspiration from extramusical sources, without, however, sacrificing any of the laws of musical form.

We possess no less than six hundred and three *Lieder*, many of which form cycles, such as *Die schöne Müllerin* (1823), *Die Winterreise* (1827), and *Schwanengesang* (1828). Some seventy were written on poems by Goethe—like *Erkönig* (1815), *Ganymed* (1817), *Prometheus* (1819)—which shows that Schubert aimed at rendering the profoundest poetry. And he did it in a congenial way.

Of Schubert's nine symphonies, only two have reached universal fame: the last, in *C* major (1828), "heavenly long," as its discoverer, Robert Schumann, praised it, and the tragic *B* minor symphony (1822), which he left unfinished after the first two movements.

At least four pieces of his chamber music have become common property of the world: an octet for strings and winds, a string quartet in *A* minor and one in *D* minor, nicknamed *Death and the Maiden* (1826) because its slow movement is a set of variations on one of his early *Lieder* of that name, and a piano quintet with the surname *The Trout*, again because its slow movement is taken from one of his *Lieder* of this name. One might add to this list the piano trio in *B \flat* major (Op. 99).

Schubert's unusual pleasure in making variations on his earlier songs, also evident in his *Wanderer Phantasy* for piano, shows how much his inspiration was vocal even in purely instrumental works.

AS AN ESSENTIAL TREND of the time, musicians grew increasingly fond of physical power and volume. It would be a cheap expedient to make the outer facts responsible; namely, the public concert halls which replaced the smaller music rooms of princely palaces and the new conception of mass and grandiosity inseparable from the French

revolution and the Napoleonic wars. An inner, and certainly more important, reason was the urge, characteristic of the age between 1760 and 1910, to get away from the often playful and always moderate spirit of yore, an urge to attain the extremes of expression, to achieve the most esoteric chamber music in almost inaudible *pianissimi*, or a clamorous, overheated, overwhelming orchestral music in *fortissimi* on the verge of deafening the audience.

Monster performances became *à la mode*—and years before the revolution. In 1784, the English celebrated the memory of Handel in a festival at Westminster Abbey, in which 525 players and singers participated, among them ninety-five violins, twenty-six oboes, and twenty-six bassoons; and it seems that the number was increased in subsequent years. The first performance of Haydn's *Creation* in 1798 used an orchestra of a hundred and eighty pieces; a performance of Handel's *Alexander's Feast* at Vienna in 1812 included an orchestra of about three hundred men, with a hundred and twenty violins, thirty-seven violas, thirty-three 'celli, and twenty-one doublebasses; a later production of Haydn's *Creation* in Vienna (1843) piled up a chorus of six hundred voices and an orchestra of three hundred and twenty pieces, with a hundred and eighteen violins. Obviously, Berlioz's famous dream orchestra, mentioned on page 331, was not far from reality. To be sure, such monster performances were exceptions; the current orchestras of the time, in opera houses and concert halls, necessarily kept within reasonable limits, with from twelve to forty violins, as compared with our usual modern maximum of thirty-two violins.

THE INSTRUMENTS themselves, even more than exceptional orchestras, give an unequivocal picture of the increasing fondness for physical power and volume. Most of them were improved in the direction of greater intensity;

and quite a number of them, so far excluded from a regular and unimpaired role in the orchestra on account of their incomplete range, submitted to radical changes and were accepted as equals.

The best example of increasing tone-volume is the evolution of the piano.

Invented two generations before and admitted to the concert stage in the sixties, the piano was given a front position and its modern 'pianistic' spirit, playing technique, and construction around 1800. The spirit was mainly due to Beethoven's predecessor, Muzio Clementi (1752-1832), the playing technique and fingering, to Clementi and to the prolific etude-writer Carl Czerny (1791-1857), whose printed works—not pieces!—number almost one thousand.

The instrument itself reached a second peak with Johann Andreas Stein in Augsburg (whom Mozart praised in a letter of 1777 as one of the very best masters) and his son-in-law Johann Andreas Streicher in Vienna. But while the delicate, easy Viennese piano, sailing still in the wake of ancestral clavi-chords and harpsichords, was well in keeping with the easy technique of the native masters of Vienna, the Czerny, Herz, or Hüntten, it was unfit to render the weight and power of Beethoven's sonatas and piano concertos. That Beethoven owned an English Broadwood, not one built by Streicher (who was his friend, though), symbolizes the victory of the recent western piano, which was developing away from the past toward the new ideals of orchestral volume. Thus, it is surely untrue that the master had written for clavichords and harpsichords before he designed his sonata in *B* flat major in 1817 expressly for the *Hammerklavier*. He himself explained the sudden appearance of this unprecedented title: he wrote to his publisher that henceforth he wanted the word piano to be replaced by *Hammerklavier* in works with German titles.

The pioneers of the powerful western piano were John Broadwood in London, Sébastien Erard in Paris, and John Isaac Hawkins in Philadelphia. Broadwood was the first builder

to cut the ties with the clavichord and the harpsichord in the outer shape as well as the inner construction. In 1800 Hawkins invented the earliest metal braces between the wrestplank with the pegs and the soundboard in order to counteract the thicker strings of the time with their ever-increasing tension. In 1821, Érard created the modern, fully reliable action with the double escapement, or automatic backfall, of the hammers to a position midway between rest and stroke, which allowed for a ready repetition of tones.

Four years later, in 1825, the piano-builder Alphaeus Babcock in Boston designed the earliest full cast-iron frame to take the tension of the strings entirely off the soundboard and the outer case. At last, the same Babcock devised in 1830 the so-called over-strung scale. In this modern arrangement, the bass strings stretch diagonally across and a little above the higher strings. This allows them to profit from the better-resounding middle of the soundboard instead of being left to the ineffectual margin, and it also allows them to arouse better the sympathetic co-vibrations of the higher strings and thus to increase the intensity of partials.

Indeed, the modern piano originated in the three decades from 1800 to 1830.

The harp, too, was then given its definitive form. The harp in use during the eighteenth and early nineteenth centuries had had a 'single action.' Tuned in diatonic, 'white-key' sequence, it had been able to sharp each of the seven notes in the octave by a semitone with the help of one out of seven pedals. But despite these seeming chromatic possibilities, it had been unable to play in any of the flat keys: even *F* major, with only one flat, required the open *A* string and the sharpened *A* string which had to supply the *B*♭.

Sébastien Érard in Paris solved the problem by giving the seven pedals a 'double action': an open string in *C* flat, for example, was shortened to *C* natural by pressing the corresponding pedal halfway down, and to *C* sharp, by pressing it all the way down. As a consequence, most black-key notes

could be provided by two different strings. Clarifying diagrams can be found on pages 400 and 401 of the present author's *History of Musical Instruments*.

THE WIND INSTRUMENTS, in their turn, hastened to complete their families. The clarinets appeared in all sizes, as sopranos, altos, basses, and even double-basses. Bands and orchestras were given solid fundamentals in the forms of serpents and bass-horns (illustrations in the same work on pages 421 and 423), which were clumsy, wide-bored wooden horns in double-S or bassoon form with open fingerholes and keys derived from the age-old zink (cf. page 191). Military bugles and the somewhat narrower cornets of postilions were developed into complete sets of sopraninos, sopranos, altos, and tenors.

The fingerholes and keys of serpents and bass-horns led to the central problem connected with the orchestral use of brasses. Far from having a complete scale from semitone to semitone, the horn and trumpet instruments had depended upon the few and incoherent 'overblowing' notes. This term indicates a steady increase of tension given to the player's lips, which results in producing other, higher notes than the 'fundamental' note produced by the weakest possible tension of the lips. Any taps sounded by an army bugle show the principle. They also show that the overblowing notes are in a natural, immutable relation: coinciding with the acoustical 'partials' of the fundamental, they are its octave, twelfth, double octave, double octave plus major third, and so on (cf. Appendix). How many of these overblowing notes can actually be produced, depends upon the bore and mouthpiece of the instrument as well as upon the skill of the player.

The first step in adding artificial notes to this natural skeleton had been taken many centuries before with the adoption of slides. Trombones and certain trumpets were made telescopic,

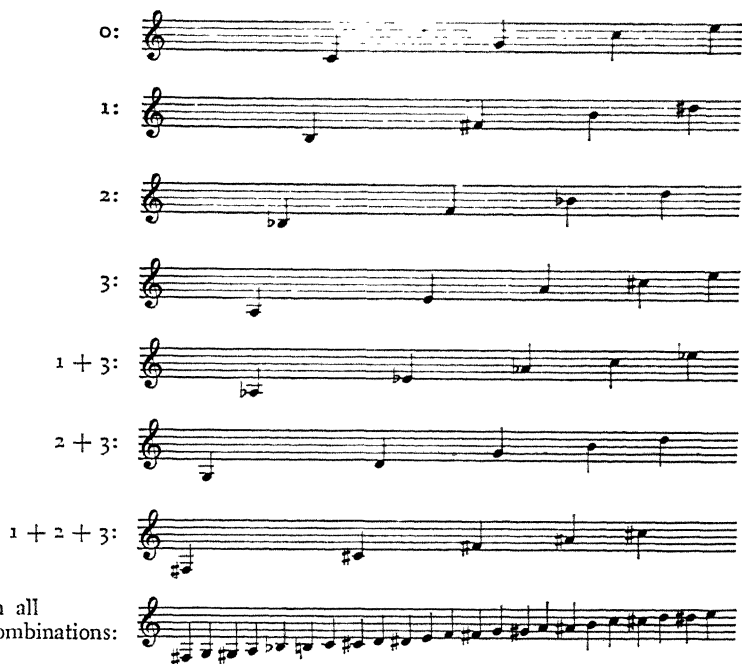
so that the changing length of the tube provided a sufficient stock of fundamentals—up to seven in semitone distance—with their overblowing notes.

French horns, indispensable in the orchestra of the later eighteenth century, were unfit for slides for reasons of form and bore. Instead, in the 1750's they had submitted to 'stopping.' Changing from their older bell-up position to a bell-down position, they allowed the player's right hand to reach into the bell and therewith to lower the individual overblowing notes by a half- or a whole-tone. But the stopped notes were muffled, inferior in timbre, and the players were seldom able to cover the embarrassing difference of stopped and open notes. And anyway, if stopping was possible on circular, wide-belled horns, it was impossible on other, straight and narrow-belled instruments.

It was more promising to try as a way out the key-covered fingerholes of the serpent. 1801 saw a keyed trumpet, and 1810 a keyed bugle (ill. *ibidem*, page 425). Within a few years, the latter developed into a family in alto, bass, and *monstre* sizes, which became well known for a short time under the grotesque name of *ophicléides*, or serpent-keys, although the instruments had the more conservative shape of a bassoon and not the fancy form of the serpent.

All these keyed instruments were discarded within a few decades. For in the meantime, from 1813 on, two German players had produced an infinitely better and definitive chromatization with their invention of valves and pistons (ill. *ibidem*, page 427ff). Instead of the required extra lengths being added in the form of a telescope-like slide, as in the case of the trombone, they were held in readiness in three U-shaped 'crooks' branching off the main tube. By the light pressure of a rotary valve or a vertical piston, these were switched on or off in order to lower the original set of 'natural,' or 'open,' notes, one for a semitone, another for two semitones, and a third for three semitones. Indeed, two or even all three of the crooks could be switched on at the same time and thereby would

lower the original set of overblown notes by a major third, a fourth, or a tritone. Altogether, three fingers on three valves were able to produce so many artificial notes that the result was an uninterrupted, uniform chromatic scale:



Chromatization even took possession of the kettledrums, though without a lasting success. In 1812, a kettledrummer in Munich, Gerhard Cramer, devised the earliest instrument of its kind to be tuned from semitone to semitone by a single movement, obviating the necessity for successive operation of six or eight individual tuning-screws.

TWO TEMPO REGULATORS, though not musical instruments in the usual sense, deserve a few short remarks in this context.

The first is the *metronome*, which was patented by Johann Nepomuk Mälzl (1772-1838) but was actually invented by the Dutchman Winkel. The apparatus consists of a ticking double-pendulum with a movable weight which, shifted up or down, determines its speed. The speed may be regulated according to a scale behind the pendulum: shifting the weight to, say, the mark 60 causes the pendulum to tick out sixty beats per minute. As a consequence, the composer's symbol at the beginning of a piece ♩ = MM 60 (Mälzl Metronome) conveys to the player the order to give a second to every quarternote. In a time from which the old, even-beating *tactus* had disappeared and in which the right effect of a piece depended a great deal upon finding out what tempo the composer had had in mind, the metronome became an almost indispensable companion of the composers as well as of the performers.

Beethoven was among the first composers interested in the possibility of prescribing the tempo of their compositions (although his MM's are not always reliable). As early as 1817, he returned to the scores of all his previous eight symphonies in order to metronomize them. And it is well known that, as a musical joke, he introduced evenly ticking eighthnotes in the scherzo of his Eighth in honor of Mälzl. Chronology, however, poses a question: the date of the metronome is 1816, and that of the Eighth is 1812. How could the master have celebrated the apparatus of Mälzl four years before it was invented? The answer is that in 1812 Beethoven had in mind an earlier, different contraption of Mälzl's, the *chronometer*, in which a little hammer struck an anvil.

As for the other time-beating device, the conductor's baton, in use long before, was given exclusive rights after 1800, although it was in a form much shorter and thicker than the modern one and was often grasped in the middle like a marshal's baton. François-Antoine Habeneck, conductor of the concerts of the *Conservatoire* in Paris (1781-1849) seems to have been the last to lead a symphonic orchestra with a violin bow.

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19

THE AGE OF BERLIOZ, MENDELSSOHN, SCHUMANN

1828-1854

THE OPENING of this period at the year 1828 is justified not only as the year of Schubert's death and of Berlioz's Op. 1, *Eight Scenes from Faust*, but also as the year in which Daniel-François Auber's *Masaniello*, or *La Muette de Pórtici*, inaugurated the unprecedented form of the *grand opéra* and made Paris once more the center of the musical world.

Grand opera betrayed the noble ideals of Gluck's heroic drama. It thrilled the senses with tumultuous choruses, pompous marches, heroes on horseback, conspiracies, clattering battles, murder, erupting volcanos, and burning palaces, with noisy orchestras, grandiose arias, and glittering ballets in places unexpected and unjustified. Grand opera meant, in Richard Wagner's biting words, "effect without cause."

The success of this new concept of opera was, alas, so great that in the year after *La Muette*, 1829, even Rossini, leader of the Italians, changed his style and wrote a French grand opera himself with *Guillaume Tell*, the national crossbow-shooting hero of Switzerland, as the title figure.

It was another foreigner who lifted this pseudo-dramatic style to its peak, Giacomo (Jacob) Meyerbeer (1791-1864), a native of Berlin and a child prodigy on the piano. He was carefully educated in both Germany and Italy. An excellent musi-

cian and probably the best music psychologist as far as the expectations and receptivity of the public were concerned, he found in his famous librettist Eugène Scribe (1791-1861) of Paris, an accomplished virtuoso of stage technique and an indefatigable inventor of ever new "effects without cause." Neglecting three unsuccessful German and seven successful Italian operas, the student might concentrate on the operas of Meyerbeer's Parisian period, which, owing to a superior technique, a brilliant, effective stage, and a truly dramatic genius, gave him his world-fame. Their sequence began with *Robert le Diable* (1831), culminated in *Les Huguenots* (1836) and *Le Prophète* (1848), and ended in *L'Africaine*, which Meyerbeer began in 1838 and only completed twenty-two years later in 1860.

Closest to Meyerbeer in style and time, and also with a libretto by Scribe, stood the still remembered opera *La Juive* (The Jewess), which the Parisian Froment Halévy (1799-1862), Bizet's father-in-law, wrote in 1835.

The Italian opera of the time—which Rossini had prematurely abandoned in 1828—found two younger masters of importance: the Sicilian Vincenzo Bellini (1801-1835), whose *Norma* (1831) succeeded in maintaining the noble line of Gluck, although with a strong Italian flavor; and the North-Italian Gaetano Donizetti (1797-1841), who, in *Lucia di Lammermoor* (1835), followed in the less distinguished footsteps of Rossini.

Besides these Westerners, one should not forget the earliest Russian-national composer, Michael Glinka (1804-1857), and his long-lived opera *A Life for the Czar* (1836), so outspokenly Russian that the internationally minded Russian aristocracy sneered at it as "coachmen's music."

The symphonic music of the time expanded between two poles, between Mendelssohn and Berlioz.

FELIX MENDELSSOHN—later called Mendelssohn-Bartholdy—was born in Hamburg on February 3, 1809. His parents, well-to-do and gifted, returned in 1812 to their native Berlin and there gave him an ideal, all-around education. He also saw Switzerland, Italy, England, Scotland, and France, and was, while still a boy, privileged to have the friendship of Goethe. After brief activities as a conductor in Düsseldorf and Cologne from 1833 to 1835, he accepted the direction of the *Gewandhauskonzerte* (Drapers' Hall Concerts) in 1835 and founded the Royal Conservatory of Music in 1843, both in Leipzig, and made that city almost at one blow a capital of the musical world. Only thirty-eight years old, he died on November 4, 1847.

The most popular of his numerous works are the two overtures, *A Midsummer Night's Dream*, for Shakespeare's play (1826, when he was only seventeen years old), and the *Hebrides*, or *Fingal's Cave* (1830-1832, after a stay in Scotland); the short and lyrical *Songs without Words* for the piano (around 1830); the *Italian Symphony* (1833) and the *Scotch Symphony* (1842); the oratorios *St. Paul* (1836) and *Elijah* (1846), and a choral cantata *The First Night of St. Walpurgis* (1832-1843); the *E minor concerto* for violin (1844); and all kinds of chamber music (a string octet, two string quintets, seven string quartets).

Happy in his character and happy in his life, Mendelssohn found little to tell of passion, struggle, despair. His was the classic serenity of an aristocratic soul and the polished diction and well-chased form of a man of the world. His works were born of a loving, not a bleeding, heart; they were neither titanic nor violent, but always sunlit, blissful, and pure.

From early childhood on, his parents imbued him with the love of Bach, and Bach became the great ideal from which he never swerved. As a boy, he introduced Goethe himself

into the magic world of the *Well-tempered Clavier*. Twenty years old, he discovered the lost manuscript of the *Passion After St. Matthew* and, against all resistance, performed it for the very first time with the chorus of the Berlin Singakademie on March 11, 1829, exactly one hundred years after Bach had written it.

THE EVENT WAS INDICATIVE of two different developments. The first one was the glorious evolution of choral societies among burghers in a time when the church choirs of all denominations were nearing the lowest level. Attempts to develop choral societies had been made before in the eighteenth century, particularly in England and Germany. But the movement became momentous only after the ex-harpsichordist of Frederick the Great, Carl Friedrich Fasch (1736-1800), had founded the earliest choral society that had more than a local impact: the *Berliner Singakademie* (1791). From twenty-seven original members, it grew under Carl Friedrich Zelter, Mendelssohn's teacher, to nearly five hundred in Mendelssohn's time, and to more than six hundred after 1840.

The other German cities followed at a rapid pace with similar laymen's choral societies—Stettin in 1794, Königsberg in 1799, Leipzig in 1800.

London underwent an analogous development. Earlier in the century, weavers and other craftsmen had founded *The Madrigal Society*, conceding to their members one glass of porter and one pipe of tobacco as a maximum of extra-musical entertainment. In the 1790's, the movement became general with the *Long-Acre*, *Titchfield*, *Handelian*, and *Surry Chapel Societies*.

The typically Swiss concept of democratic men's societies for singing, as established by Hans Georg Nägeli in Zürich

(1773-1836), made considerable headway after 1805, at first in Switzerland and later in South Germany.

The United States, incidentally, had prefigured the latest events in Europe. Andrew Adgate had founded an *Institution for the Encouragement of Church Music* in 1784. Three years later, it adopted the name *Uranian Academy of Philadelphia*, and not only gave vocal concerts, but also provided free singing lessons to its members.

WHILE THE CREATIVE WORK of their time was focused on instrumental rather than on choral music, these societies revived music of those periods productive of choral styles. They went back to Bach and Handel, and even to Palestrina and Lassus. In so doing, the choral movement converged with the second movement of which Felix Mendelssohn's resuscitation of the Passion was indicative: the return to older music.

The resurrection of the Passion was indeed the prelude—though hardly the cause—of an amazing awakening of interest in the music of the Baroque. In the 1830's, Dr. Carl Proske, originally a physician, collected an impressive library of sixteenth and seventeenth century works, published Palestrina's Marcellus Mass in 1850 for the first time, and began in 1853 to print an important series of ancient church music in ten volumes under the title *Musica Divina*. In 1837, the publishing house C. F. Peters in Leipzig began an edition of the complete works of Bach, and in 1839, Franz Commer in Berlin began a rival anthology of church music, in thirty-eight volumes, under the title *Musica Sacra*. Meanwhile, the Prince de la Moskowa founded in 1843 a *Société des Concerts de Musique Religieuse et Classique* in Paris and printed the pieces performed there in a *Recueil . . . de Musique Ancienne* in eleven volumes embracing two hundred years of music, from Arcadelt early in the sixteenth century to Handel and Bach.

At last, the year 1850 witnessed the foundation of the *Bach Gesellschaft*, which began in the following year to print the authoritative edition of Bach's complete works, the earliest of a long, comprehensive list of *Gesamt-Ausgaben*.

HECTOR BERLIOZ (pron. -ose) was born on December 11, 1803, in the southeast of France and died on March 8, 1869, in Paris.

He wrote no chamber music. His works include two symphonies, the *Symphonie Phantastique* (1830) and *Harold en Italie* (1834); the choral works *Requiem* (1837), *La Damnation de Faust* (1846), *Tedeum* (1849-1854); and the operas *Benvenuto Cellini* (1834-1837) and *Les Troyens* (1855-1863).

Thinking of Berlioz means thinking of wild imagination, enormity in sizes and ideas, and fascinating colors—an imagination that stops short of nothing, neither of bizarreness nor of morbidity; an enormity that finds an end in itself in gigantic proportions and the piling-up of masses never heard before; a color that often outshines form and line. In his *Phantastic Symphony*, Berlioz allows the hero—Berlioz—to be dragged to the gallows, and in a subsequent continuation, the half-symphonic monodrama *Lélio*, or *Return to Life* (1831), to drug himself—in response to an unrequited affection of the composer for an English actress, who later, however, became his wife. In the second section of his *Requiem*, he represents the trumpets of Doomsday with four *fortissimo* brassbands in addition to the orchestra and sixteen kettledrums. And on a visit to Rome he intended to match the gigantic dimensions of St. Peter's with a "colossal" oratorio, *The Last Day of the World* (which was never written). And he dreamed of a utopian orchestra of 465 pieces, with 120 violins, 40 violas, 45 'celli, 37 doublebasses, 30 pianos, 30 harps—which after all was not entirely utopian (cf. page 318).

Not only are Berlioz' main dramatic works grand operas in the truest sense of the word, even his choral works and symphonies are, in the spirit of grand opera, full of fascinating episodes far-fetched and "without cause." There is the gruesome march to the gallows in the *Phantastic Symphony*, the *Ronde des Pifferari* in the *Harold Symphony*, the scherzo *La Fée Mab* in the choral symphony *Roméo et Julie*, the Hungarian *Rakoczy* march in *La Damnation de Faust*. This intrusion of music for the sake of music without inner, poetical necessity is particularly odd in the work of a master who took his inspiration so often from extramusical provinces that ignoramuses have called him the 'father of program music.' This he was not. Nor was he the 'inventor' of the *leitmotif* (cf. Chapter 20), although he availed himself of ever-recurring ego-symbols, both in the *Phantastic Symphony*—there, under the excellent title of *Idee fixe*—and in the autobiographic viola solos of the *Harold Symphony*, which, in a way, broke the ground for the later *leitmotive* of Wagner.

Berlioz was indeed a pathfinder—the great pioneer of 'modern' music—who severed the ties with the past and reached for goals unknown before he came, who widened the scope of music to horizons never unveiled before he set his eyes on them, who gave the orchestra riches and significance of which no man before him had dreamed.

F RÉDÉRIC CHOPIN was, in a way, the strongest imaginable contrast to Berlioz. Both masters were typically romantic—thoroughly self-expressive, sensitive in the extreme, unbalanced, melancholy. And yet they were as far apart from one another as an engraver is from a fresco muralist. Berlioz, ever restive, tempestuous, phantastic, extravagant, was unwilling and unable to do the fine chase-work of the smaller forms and clung to colossal dimensions and the glaring colors of the orchestra. Chopin, morbidly delicate as a man and a

composer, tearful, desperately changing and rechanging every single measure, and pining, as Shelley would say, "for what is not," was exclusively pianistic and gave his best in the smaller forms of preludes, waltzes, mazurkas, etudes. He was entirely unpolyphonic and concentrated on melody, which he often dissolved in the foam of coloraturas that we would be tempted to relate to Italian arias, were they not so airy, sublimated, poetic that any thought of boastful virtuosity seems out of place.

Out of his pining, painful struggle arose a musical world that, in a hundred years, with all its limitations, has lost nothing of its irresistible charm. Hardly any other of the earlier romantic generation has survived in equal freshness; hardly any other is equally convincing, whether he admits us to his fleeting dreams or chivalrous visions, to his hope or despair. And hardly any other of that age of rising nationalism is so supranational, so all-human.

Chopin was born in Warsaw on February 22, 1810, the year of Schumann's birth. But only his mother was Polish, his father was French, and a teacher. Moreover, Chopin left his country for good when he was nineteen years old. After a long stay in Vienna, he arrived in 1831 in Paris, which remained his permanent residence for the rest of his life. After years of professional successes as a composer and a teacher, he died from tuberculosis on October 17, 1849, not yet forty years old.

ROBERT SCHUMANN, born a few months after Chopin, on June 8, 1810, in Zwickau, Saxony, studied law at his father's request, but decided to become a musician with the encouragement of his teachers Friedrich Wieck (piano) and Heinrich Dorn (composition). His career as a piano virtuoso found a premature end before it had started when an unfortunate treatment, undertaken for the sake of

greater mobility, resulted in a crippled hand (1832). Forced to concentrate on composition and critical writing, he founded the influential *Zeitschrift für Musik* in 1834 and interceded with enthusiasm and skill in favor of modern music against routine and frigid academicism. This enterprise granted him honor and satisfaction, but not enough of a living to make a marriage with Wieck's young daughter Clara, herself a composer and great pianist, desirable in her father's eyes. In 1840 the untenable situation was resolved by elopement.

Never in his life could this lovable man gain a secure living. He was appointed as a teacher in score-reading when his devoted friend Mendelssohn established the conservatory in Leipzig, but he was able to keep this position no longer than a few months. One more possibility was offered him when, at the age of forty, he was called to Düsseldorf-on-the-Rhine as the Municipal Musikdirektor (1850). Discharged three years later as a hopeless mental case, he jumped into the Rhine. He was rescued, and confined in a sanitarium near Bonn. There he died, forty-six years old, on July 29, 1856.

Schumann wrote only four symphonies:

1. B flat major ('Spring'), 1841
2. C major, 1845-1846
3. E flat major ('Rhenish'), 1850
4. D minor, 1841-1851

He composed *Das Paradies und die Peri* (1843), Scenes from Goethe's *Faust* (1844-1853), and other choral works; an opera, *Genoveva* (1847-1848), which the public received without enthusiasm, and incidental music for Byron's *Manfred* (1848-1849) with a truly great overture; excellent chamber music, with a driving piano quintet in E flat major, three string quartets, and a piano quartet in the single year 1842; and a great number of beautiful *Lieder*, many in cycles, the two greatest of which, *Frauenliebe und Leben* and *Dichterliebe*, also belong to one year, 1840, the year of his marriage.

But Schumann's heart was dedicated to the piano. True, his

piano music was written mainly between 1829 and 1839, in his twenties, and his one piano concerto, in A minor (1841-1845)—perhaps the most Schumannesque of all his works—was already a bridge to orchestral writing. But he never became a genuine orchestral composer, either in handling the instruments or in symphonic inspiration and technique. In all his scores one senses the pianist.

His piano compositions shun the classical form of the sonata. He created, for the most part, what might be called poems, the greatest of which seems to be the *Phantasie* in C major, Op. 17 (1836). The typically romantic predilection for smaller, lyrical character-pieces, apparent in Beethoven's *Bagatelles* and Schubert's *Impromptus* and *Moments musicaux*, in Mendelssohn's *Songs without Words* and Chopin's innumerable dances, preludes, and nocturnes, reappears in Schumann's work, from the time of his *Papillons*, or *Butterflies* (1829-1831). Indeed, in the full romantic spirit of obsession with the night, Schumann matched Chopin's *nocturnes* with *Nachtstücke* (1839).

But not until Schumann were such character-pieces published in homogeneous sets with related ideas and common titles, such as the *Davidsbündler Tänze*, Op. 6 (1837-1850), depicting the 'David-Leaguers' engaged, like David, in fighting the Philistines, the *Carnaval*, Op. 9 (1834-1835), the *Fantasiestücke*, Op. 12 (1837), the *Kinderszenen* (Children's Scenes), Op. 15 (1838), or the *Kreisleriana*, Op. 16 (1838-1850).

THE WORD VIRTUOSO has appeared several times in the pages of this chapter. Virtuosity, indeed, had its heyday in the thirties and forties.

True, there had always been virtuosos in the sense of accomplished masters of the voice or some instrument; all the great composers of whom the history of older music speaks

were admirable singers or players, but their ability was in the service of creative work (I am not speaking of the castrati and divas of the opera around 1700).

The instrumental virtuosos of the earlier part of the nineteenth century were different. They concentrated on playing, and composed their pieces of doubtful musical value in the service of boastful bravura technique. Incredibly spoiled, adored, deified, they toured from country to country, from city to city, exhibited the glittering, empty passages of their *études brillantes* and paraphrases of popular operatic melodies, and distracted the interest of music lovers from creative art to dazzling, acrobatic dexterity.

Three out of many hundreds of names resounding all over the world may represent that curious epoch of nimble-fingered heroes, intoxicated, fanatic audiences, and red-ribboned laurel wreaths: in the field of the violin, the almost legendary, demoniacal Niccolò Paganini (1782-1840), and in the field of the piano, the Viennese Sigismund Thalberg (1812-1871) and young Liszt, who, disgusted, gave up his virtuoso career towards 1850 to turn to the higher aims of a composer and educator.

THE HISTORY OF INSTRUMENTS has a few remarkable dates during this period of 1828 to 1854.

The organ took the decisive step toward a modern action with two English inventions of the greatest import. Joseph Booth's fully pneumatic action of 1827 did away with the delicate, uneven 'mechanical' system which connected the keys and the pipes by wooden trackers, stickers, and hooks, and it thus made playing easier, more even, and more dependable. Charles Spackman Barker (1806-1879) followed around 1832 with a more successful *pneumatic lever*, which preserved a part of the mechanical-tracker system but added a wind-fed conduit to transmit the pull pneumatically by the aid of a

relaying system of valves or pallets, the last of which opened the pipe (illustrations in the author's *History of Musical Instruments*, pages 442 and 443).

In a roundabout way, the organ conquered chapels and homes in the form of a cheap and small ersatz instrument with reeds, without pipes, and generally without pedals: the harmonium, which owes a great deal of its perfection to American manufacturers, although it hails from France. In 1836, A. Prescott & Son in Concord, New Hampshire, contributed the curious *rocking melodeon*, in which the rocking motion of the whole case operated the bellows.

The wind instruments of bands and orchestras, too, underwent revolutionary changes.

In 1832, the year of Barker's pneumatic lever, Theobald Boehm of Munich produced the earliest Boehm flute. In his model, the misplaced, equidistant, smallish fingerholes of older flutes yielded to holes of sufficient size and acoustically correct positions regardless of easy fingering, which was cared for, however, by an ingenious system of keys and levers (illustration in the same book on page 409). Certain features of the Boehm flute, in particular the ring-keys over open holes which, on being pressed down, operated accessory, tone-correcting keys, were given to the clarinets as well from 1839 on.

In the family of clarinets, the bass, hardly ever used before, was given its modern straight form and its perfect quality in 1836, and in the same year found an important place in Meyerbeer's opera *Les Huguenots*. The builder of this new bass-clarinet was Adolphe Sax of Brussels, who later moved to Paris.

However, it was not to the bass-clarinet but to an entirely new family of instruments that Sax owed his world renown—to the *saxophones*. They left his workshop around 1840 and appeared for the first time in a French score of 1844, but were on the whole so little successful outside France that Richard Strauss added a careful *ad libitum* to their four parts in the score of the *Sinfonia Domestica* (1903) and had to leave

the parts unperformed himself because he could not find the proper players in Germany. Their belated bloom in the twentieth century is due to the rise of jazz.

Saxophones have a parabolically widening, metal tube, with the bell up, in the shape of a tobacco pipe (excepting the soprano size). They follow the clarinet in their beak-shaped mouthpiece with the single reed, but the oboe in their key arrangement. Their versatile sound is too familiar to require description.

The name of Sax is also connected with a movement to fuse the features of cornets, bugles, and tubas in one complete, homogeneous family of horns, from the smallest size an octave above the usual *B*-cornet to the double-bass in *C* or *B*, or even to more gigantic sub- and double-sub-basses a fifth and an octave below. Most of these instruments were devised in some form and were introduced here and there in the twenty years following 1828—as, for instance, cornets, tenors, baritones, bass-tubas. Thus, the saxhorns of 1845 were not unprecedented instruments. But they were an equalized family, where the various althorns, euphoniums, and tubas had once been heterogeneous, independent instruments with timbres hard to blend. Illustrations can be found in the author's *History of Musical Instruments* on pages 429-433.

All the trumpets and horns—except the sliding trombones—accepted valves of either the rotary or the piston system, during the 1830's in the bands and during the 1840's in the orchestras.

Pitch had generally an upward trend and reached the modern standard or even exceeded it. A first attempt at international standardization at $a' = 440$ vibrations, made by a congress of physicists in Stuttgart, had no success. A quarter of a century later, in 1858, under the pressure of an ever-growing international exchange of traveling artists, a committee appointed by the French government decided in favor of 435 vibrations. But it took thirty more years before a special conference held in Vienna in 1889 confirmed this decision and

recommended its universal acceptance. Alas, pitch is today as arbitrary as ever and is certainly above 435 vibrations.

Speaking of general regulations, in 1831, fifty-five years before the international convention at Berne, an American Act of Congress granted the first musical copyright and therewith paved the way for the independent work of the modern composer, who is hardly ever supported, as his ancestors were, by courts, churches, or townships.

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20

THE AGE OF WAGNER AND BRAHMS

1854-1886

THE THREE DECADES from 1854 to 1886 saw an almost paradoxical marching under the flying banners of realism and of irrationalism, of materialism and of idealism. Men of all tenets and temperaments joined the marchers, those who believed in the senses rather than in emotion and ideas, and their opponents who, in search of passion or profundity, despised the reaction of the senses, those who accepted, shaped, and interpreted the merciless world of then and there, and those who created imaginary worlds of saga and fairytale in a dreamy, romantic escape.

But in one thing they shared, in the intensity, indeed, in the violence of their expression and the almost total lack of unconcerned playfulness, serenity, or naive simplicity. Different as they were, they all acted as pioneers, fighters, apostles.

No wonder that the poets left the quieter forms of lyrics and contemplation and concentrated on tragedy, as Hebbel and Ibsen did. No wonder that music did the same. Again it was a natural process that musical tragedy in a naturalistic age should challenge the supremacy of music in favor of dramatic power and intensity, that the separate, self-sufficient *arias*, *cavatinas*, and ballets should be looked at distastefully as undramatic, delaying episodes to be replaced by an 'endless' melody, and that this melody, though often rising to pure and

beautiful lines in the older sense of the word, should be, on the whole, an almost speech-like recitative in the spirit of Monteverdi, Lully, and Gluck.

The man who, conquering the older 'number opera,' created this new, inevitable 'musical drama' was Wagner.

RICHARD WAGNER was born on May 22, 1813 in Leipzig. In his younger years he was attracted by poetry rather than by music. This was a characteristic disposition in a man who later wrote his texts himself, and often long before setting them to music, and who hardly ever composed any music for the sake of music outside the stage.

His first attempts as a composer followed trodden paths. Even *Rienzi*, the tragedy of an Italian popular leader in the fourteenth century—the earliest of his works which are still in the repertoire of opera houses—was in spirit and style a 'grand' opera with all appurtenances—excited choruses, clattering marches, prayers, conspiracies, and a final collapse of the burning palace. It was, indeed, conceived and written in Paris, homestead of the grand opera, where he had tried to get a foothold after having gone through the mill of provincial German theaters as a conductor for several years. But between 1839 and 1842, in his few Parisian years, he found himself and his mission. While *Rienzi* was being accepted for performance at the Royal Opera of Berlin, he wrote *The Flying Dutchman*—after one of Heinrich Heine's tales—the tragedy of the cursed seaman who sails for all eternity but is allowed to go ashore every seven years, until a faithful woman redeems him. Contrary to the ideals of the grand opera, the *Dutchman* goes straight through a dramatic development, from the hero's arrival in a small Norwegian port to his death and salvation, without any digression.

The score was accepted at the Royal opera house of Dresden, and he himself was given the position of *Hofkapellmeister*.

The two following Dresden operas, *Tannhäuser* (1845), the drama of a *Minnesinger* lost in carnal sin, and *Lohengrin* (1847), in which the Grail saga is interwoven with an episode from early German history, were not basically different from the older concept of romantic opera. They still had their duets, prayers, choruses, finales, but these were organically embodied in 'scenes' instead of forming separate 'numbers.' There was still romantic delight in supernatural forces—the lust and the spell of *Tannhäuser's* *Venusberg*, the miracle of the budding crosier, the swan that tugged the boat of *Lohengrin*, the mysterious knight himself, who must not be asked who he is and whence he comes—and there is also, at least in *Tannhäuser*, as in the *Dutchman*, redemption through the faithful love of a maiden. And yet these works are realistic in the sense that all the persons are fully alive, human, convincing, and very far from the usual operatic stereotypes.

The revolutionary years of 1848 and 1849 found Wagner as a radical leftist. Exiled and forced to live in Switzerland for twelve years, he filled a momentous pause in his musical creativeness with writing aesthetic and pseudo-aesthetic pamphlets.

When he returned to his music-paper, he had broken with the past. A new style had taken shape. The first work in the novel language was truly gigantic; it took him more than twenty years to complete, and it formed a four-night cycle (or, properly, a cycle of one preluding play and three nights): *Der Ring des Nibelungen*, the evil ring of the demon of the underworld.

Drawing from Nordic and German mythology and forcing his poem into archaic alliterations, Wagner described the doom of the gods under the curse of gold and lust for power, from the day on which the giants build the towering castle of Valhall to the Twilight of the Gods, when the flames from Siegfried's pyre consume the world of Wotan.

In the Ring of the Nibelung—as in Monteverdi's works and those of Gluck—the drama became paramount; indeed it was promoted to the rank of *Gesamt-Kunstwerk*, a 'work absorbing

all the arts,' poetry, music, gesture, and stage-painting, which obey the progress of the drama without a life of their own. And again as in Monteverdi's works, a kind of *stile recitativo e rappresentativo* rules the singing; with the exclusion of arias and other self-sufficient forms, the voices carry on in an 'endless' melody without caesuras, which adapts itself flexibly to the ever-changing actions, thoughts, and moods of the *dramatis personae* and yet is able to dwell on lyrical climaxes in a broad and beautiful stream.

The orchestra, weighty, rich, and eloquent as never before, was not confined to mere accompaniment. It stressed and deepened the action and conveyed what text and gestures were not able to say. The words of this unique orchestral language are the *Leitmotive*, or 'leading motives,' concise melodic turns, descriptive, significant, and expressive, which follow the drama with its outer and inner action, narratives, and emotional outbreaks as the ever-present beholder and herald.

In 1857, in the middle of *Siegfried*, Wagner interrupted his work on the *Nibelungen* scores to write two other dramas of a very different nature, which probably represent the climax of his creative life: *Tristan und Isolde* and *Die Meistersinger von Nürnberg*.

While the melodic language of the *Ring* was preponderantly diatonic, and even triadic—with the motives forming in tonic-third-fifth-octave patterns—*Tristan und Isolde*, the actionless drama of longing for love and night and death, refined melody and harmony to the utmost with an unprecedented chromaticism. The logical enchaining and modulating from chord to chord was often abandoned for breath-taking illogical shifts—illogical from the viewpoint of school harmony. *Tristan* was the peak in the evolution of romantic harmony and the beginning of its disintegration in the hands of the impressionists.

Compared with the *Ring*, and with *Tristan*, the score of *Die Meistersinger* is almost a reversal to older ideals on which the master had seemed to have turned his back, to diatonic melody and 'correct' harmony, to the overture form, given up

since *Tannhäuser*, to self-sufficient solo songs, and even to a magnificent, regular quintet. But the matchless perfection of the *Meistersinger* precludes any such oversimplification. Was it not rather that after having done his pioneering work with iron consistency to the end of the road, he stopped for a blissful moment to rest from tragedy, saga, and magic potions, from chromatic refinement and melodic austerity?

Wagner's dramatic works, excluding the earliest attempts, are:

- Die Feen* (1833)
- Rienzi* (c. 1840)
- Der Fliegende Holländer* (1842)
- Tannhäuser* (1845)
- Lohengrin* (1847)
- Das Rheingold*, first part of the *Ring* (1854)
- Die Walküre*, second part of the *Ring* (1856)
- Tristan und Isolde* (1859)
- Siegfried*, third part of the *Ring* (1865)
- Die Meistersinger von Nürnberg* (1867)
- Die Götterdämmerung*, fourth part of the *Ring* (1874)
- Parsifal* (1882)

Of non-dramatic works, only two are important: *Eine Faust-Ouverture*, written first in 1840 and rewritten in 1855, at the time of the *Walküre*, and the *Siegfried-Idyl* (1870), a symphonic poem for a small, almost chamber-music orchestra on motives from *Siegfried*.

Growing public recognition of Wagner's greatness slowly changed his often precarious situation. He found a faithful friend and apostle in Liszt, some private, generous Maecenases, and a powerful protector in the idealistic King Ludwig II of Bavaria. An amnesty allowed him to return to Germany; he took residence in Bayreuth, not far from Nürnberg, built a home, *Wahnfried*, and eventually a theater of his own, the *Bayreuther Festspielhaus*. This theater, far from commercial interests and the routine of ordinary theaters, was intended to give model performances of Wagner's works in summer festivals, and particularly of the last one, the mystic, almost

sacred play of the Holy Grail, which was withheld from any other stage until the rights of Wagner's heirs expired in 1913—thirty years after the master had died in Palazzo Vendramin at Venice on February 13, 1883.

Interested in the characterizing force of orchestral color and in particular need of majestic hues for the world of gods that the *Nibelungen* score conjures up, Richard Wagner introduced a few additional brasses in the *Ring*: a so-called *bass trumpet* in the range of the tenor trombone (used in Bavarian and Austrian cavalry bands since early in the century); a *double bass trombone*, an octave below the tenor trombone and usually built in the (outer) shape and size of the latter with a twofold tubing which allows the various positions of the slide to agree in both instruments; and the *Wagner tubas*. These are tubas, two in *B flat* (tenor) and two in *F* (bass), of a slightly different parabolical bore and with a kind of French-horn mouthpiece, which render a solemn, less explosive tone than other tubas. Later, they were scored also in Bruckner's Seventh and in Strauss' *Elektra*.

At the time Richard Wagner was heaping up his massive *Ring* orchestra with sixteen woodwinds and seventeen brasses, the organ, too, moved towards an unparalleled power. The number of stops exceeded a hundred in larger works; and the organ builders not only exaggeratedly increased the general wind pressure, but also devised high-pressure stops, like *tuba mirabilis* or *ophicleide*, which demanded three or four times the average pressure. To cope with these innovations, Charles Spackman Barker in London improved his pneumatic lever, making it an electro-pneumatic instead of a mechano-pneumatic action.

America paid a curious tribute of her own to colossal trends in the sensational concerts that Patrick Gilmore, "the super-salesman of music," conducted between 1864 and 1892 with a band of one thousand pieces and a chorus of ten thousand, with fifty anvils, and a battery of cannon outside firing on the beat.

BESIDES, DESPITE, AGAINST the music drama of Wagner, the French mainly persisted in the concepts of the grand opera, but also had gigantic world successes with a few works that we cannot fully, or at all, connect with the typical grand opera of Meyerbeer's and Auber's time:

Charles Gounod's *Marguerite* of 1859, the year of *Tristan*, an un-Faustian, lyrical play after Goethe's *Faust*, which celebrated in 1924 its jubilee of two thousand performances by the Paris opera alone.

Ambroise Thomas' *Mignon*, after Goethe's novel *Wilhelm Meister*, of 1866, the time of the *Meistersinger*.

George Bizet's *Carmen*, the racy play of love and jealousy, of soldiers, smugglers, and bullfighters under the parching sun of Andalusia, of 1875, when Wagner had completed *Die Götterdämmerung*.

Camille Saint-Saëns' *Samson et Dalila* (1877), the closest to the concept of grand opera, with its famous alto aria in D flat major.

Jules Massenet's sentimental *Manon* (1884).

In the year of *Mignon*, 1866, the operatic stage, so far dominated by masters of Germanic and Romanic countries, opened for the first time to a Czech, Bedřich (Frederick) Smetana, and his immortal, comic, peasant opera *The Bartered Bride*, with its inexhaustible stock of sparkling rhythms and melodies. Eight years later, another Slav, Modest Mussorgsky (1839-1881), gave the world his audacious, somber, tragic opera *Boris Godunov* (1874), which, though in a class of its own, has had a vital influence on musical impressionism. A more 'professional,' orthodox, and polished revision of the score, made in 1896 by Nicolai Rimsky-Korsakov, was not altogether an improvement.

WHILE ALL THESE MASTERS created only one single successful opera and had, more or less, to stand in the shadow of Richard Wagner's domineering work, there was one man to counterbalance the power of Bayreuth with a long succession of operas in a different, opposite style: Giuseppe Verdi.

Verdi was the son of an innkeeper in a village not far from Parma, Italy. He was born on October 10, 1813, only a couple of months after Wagner, just as Bach and Handel had been born in the same year.

And just as in Wagner's work, Verdi's extra-theatrical compositions are the less important. We have to except, though, a *Requiem* (1874) and four *Pezzi sacri* (Sacred pieces), in which Italian melody and smiling serenity have found a supreme expression.

Verdi's world was the musical stage, which allowed him to blend the two gifts that nature had conferred on him, a genius for melodic invention and an infallible instinct for dramatic action and character. From 1839 on, he composed operas at a pace unusual in the nineteenth century. But only two successes rewarded his early attempts: *Ernani*, after Victor Hugo's romantic drama *Hernani*, in 1844, and *Luisa Miller*, after Friedrich Schiller's bourgeois tragedy *Kabale und Liebe*, in 1849.

Then, exactly at the time of Wagner's break with the past after *Lohengrin*, Verdi entered maturity with the three most popular of all his works: the gruesome story of the hunchback *Rigoletto* and his daughter (1851), after Victor Hugo's historical drama *Le Roi s'amuse*; *Il Trovatore* (1853), after a play by Garcia Gutiérrez; and *La Traviata*, 'She who lost her way' (1853), after Alexandre Dumas Jr.'s play *La Dame aux Camélias*, one of the earliest operas with its scene laid in modern life.

With all their dramatic force, these works made the texts subservient to music and were organized in separate numbers as *arias* and *cavatinas*, duets and *terzetti*, choruses and finales.

Despite so un-Wagnerian an attitude, something unexpected occurred. In a third, concluding phase of his life, Master Verdi converged with Wagner's ideals when he accepted continuous scenes instead of numbers, though he did not adopt chromatic harmony, or the system of *leitmotifs*, or, for that matter, any of the intellectual approach of Wagner.

The three wonderworks of that concluding period took an unusual time to complete—an indication of how far they were from the routine. *Aida*, on a text by A. Ghislanzoni, with the scene in ancient Egypt, was commissioned to celebrate the inauguration of the Suez Canal in 1871; *Otello*, on Arrigo Boito's text after Shakespeare's drama, was completed in 1887; and *Falstaff*, again on a text of Boito's after Shakespeare's comedy *The Merry Wives of Windsor*, was finished in 1892. Verdi was seventy-nine years old when this last, incredibly lightfooted, transparent opera crowned the work of his life. Eighteen years after Wagner, Verdi died on January 27, 1901.

THE SERIOUS OPERA, and even more the exalted music drama, profound and presumptuous, produced an antidote, just as, a hundred years earlier, the heroic stage of Gluck had coincided in time and space with the French comic opera and the *Singspiel* of the Germans. This antidote was the *operetta*, a comic opera in the lightest vein, with spoken dialogues, but often original, dashing, and witty.

Its father, Franz von Suppé of Vienna (1819-1895), wrote *Leichte Kavallerie* (1866) and *Fatinitza* (1876) and more than two hundred other scores for the stage. His greatest successor in Vienna was the Waltz King Johann Strauss Jr. (1825-1899), composer of the unforgotten, dance-provoking 'Bat,' or *Fledermaus* (1874). Less dance-like, rhythmically richer were the

poignant, satirical Parisian operettas of Jacques Offenbach (1819-1880)—*Orphée aux Enfers* (1858), *La Belle Hélène* (1864), *La Vie Parisienne* (1866)—which range with the caricatures of Daumier and Gavarny. Little later, London joined the continental capitals with the operettas of Sir Arthur S. Sullivan (1842-1900), which reached an early climax in *The Mikado* (1885).

The American Victor Herbert (1859-1924), with *Naughty Marietta* (1910) and forty other operettas, belongs in the following generation.

SYMPHONIC MASTERS. Estranged from the classical forms of the sonata and the symphony, the orchestral and chamber types of music underwent changes no less incisive than those of the opera. Their pathfinder and leader was Liszt.

Franz Liszt, the closest friend and the herald of Wagner, was a cosmopolitan counterpart of the nationalistic master of Bayreuth. He was rooted in Hungary, Austria, Germany, France, and Italy. He was a child of this world and yet an ecstatic son of the Church, an influential, pioneering composer, a famous teacher, writer, conductor, and the greatest pianist of his time.

He was born in Oedenburg, Hungary, on October 22, 1811, but, after a few concerts as a child prodigy, was taken to Vienna to study with Carl Czerny and Antonio Salieri. His education was completed in Paris under the guidance of Ferdinando Paer and Anton Reicha. Both taught him composition—he felt that he was no longer in need of a piano teacher and began a brilliant international career as a virtuoso.

He gradually lost interest in virtuosity and concentrated on poetry-inspired composition when, tired of a futile life in concert halls and salons, he accepted the position of a court *Kapellmeister* at Weimar, Thuringia, in 1842. After years of almost feverish activity as a conductor, teacher, composer,

player, and writer, he resigned in 1861 because his progressive taste met with difficulties at court and in the town. He turned to Rome and became *abbate* when the Pope refused to divorce his ladyfriend from the Prince of Sayn-Wittgenstein and thus made a remarriage impossible. The remaining twenty-five years of his life were spent alternately in Weimar, Rome, and Budapest, and in Bayreuth, near the Wagner family, where he met a peaceful death on July 31, 1886.

His works reflect his life and character. His was an international style, in which the German, French, and Italian elements were blended—Faustian stress and sentimental pining, the chivalrous and the Catholic, profundity and showmanship, Bachian polyphony and Verdian *belcanto*, Palestrinian harmonies and fiery *csardas* rhythms. Chamber music, however, had no place in his work; intimacy was alien to him. There are piano and orchestral works by Liszt, oratorios, Masses, and songs, but neither trios nor quartets.

In the first half of his life, he spent many years in writing empty, 'effect-full' paraphrases of favorite melodies from other men's operas. But his emphasis shifted radically to the meaningful side of music when he settled in Weimar.

In less than ten years, he made his most important contribution to music with a set of twelve *symphonic poems*—a new name and a new form. They are comparatively short orchestral pieces, which do not follow the pattern of the classic symphony, but rather the train of thought in some work of poetry or painting that provided the creative inspiration. Their names are:

Ce qu'on entend sur la montagne, What One Hears on the Mountain (1840, 1857)

Prometheus (1850)

Festklänge, Festive Sounds (1853, 1860)

Orpheus (1854-1856)

Les Préludes (1856)

Tasso (1856)

Hungaria (1856)

Die Hunnenschlacht, The Battle of the Huns (1856)

Héroïde funèbre, Heroic Dirge (1857)

Mazeppa (1858)

Hamlet (1859)

Die Ideale, The Ideals (1859)

At the same time, in the fifties, Liszt wrote two symphonies which, just like the symphonic poems, disown the classical pattern and obey a poetic program. One might call them symphonic poems in several movements. It is revealing that he called the three movements of his *Faust Symphony* (1853-1861)—*Faust*, *Gretchen*, *Mephistopheles*—"character pictures." They describe but do not develop. At the end of this symphony, he called in a male chorus for the mystic, last verses of Goethe's drama; and in a similar way, he crowned his second, *Dante Symphony* (1856), with a Gregorian *Magnificat* for a women's chorus.

Again in the Weimar period, he composed his outstanding piano music, in which virtuoso technique is made subservient to forceful expressiveness: the concertos, the *Années de Pèlerinage*, or Years of Pilgrimage (1848-1852), the sonata in B minor (1853), and the *Études d'Exécution transcendante* (1854). And, still within that time of unbelievable fertility, he composed the *Missa Solemnis*, or *Gran Mass*, for the Hungarian city of Gran, and the Thirteenth Psalm, with a fervent tenor solo, both in 1855.

The time of his deepest religious experience, the sixties, gave us his two oratorios, *The Legend of Saint Elizabeth* (1862) and *Christus* (1866).

ANTON BRUCKNER, born in Upper Austria in 1824, lived in needy circumstances until he became organist of the cathedral at Linz and, later, organist of the Imperial Chapel and teacher of composition at the Imperial Academy of Music in Vienna. As such, he died in 1896, one year before Brahms.

Except for a *Tedeum* and three Masses, his main work is nine symphonies of huge proportions. The ninth was left without a last movement and is sometimes performed with the *Tedeum* to replace it. The peak among the nine is probably the solemn, far-stretching Seventh in *E* major, first played in 1884.

Bruckner's art is deep, monumental, powerful, but its scope is not wide. It expands between a festive, typically Austrian and Baroque Catholicism and hearty peasant dancing. He has nothing of the ascetic restraint and chamber-music texture of Brahms, whom he profoundly disliked. Instead, he has much of Wagner's heroic attitude—one of the symphonies is even dedicated to the master of Bayreuth—without, however, transplanting Wagner's dramatic style into the symphonic form. His thematic ideas are great, majestic, exalted, but he lacks structural discipline and often falls a victim to that repetitiousness which has barred him the way to countries outside Germany.

Despite this want of formal economy, the mere fact that, ignoring the new form of the symphonic poem, he concentrated on the classical symphony and by-passed all the descriptive, extramusical trends of the time, gives him a place in the least romantic wing of romanticism.

JOHANNES BRAHMS (Hamburg 1833-Vienna 1897) spent his life—if we disregard a few short-lived positions as a conductor in Vienna and elsewhere—as a free composer, residing from 1862 on mainly in the Austrian capital.

He worked in all the lyrical fields of music but ignored the dramatic and epic forms of the opera and the oratorio. The soaring peaks among his works are: four symphonies, the first in *C* minor (1875), which Hans von Bülow, alluding to Beethoven's nine, enthusiastically called *The Tenth*, the second

in *D* major (1877), the third in *F* major (1883), and, towering over the others, the fourth in *E* minor (1885); *A German Requiem* to the memory of his mother (1857-1868), which, without any connection with the Catholic Mass of the Dead, draws from the Scriptures in German; and an immense treasure of songs, and piano and chamber music which defies enumeration and even any selection dictated by value rather than personal taste.

Brahms was the strongest antipode of Wagner, Liszt, and Bruckner. He was a romantic only in his urge to create emotional expression. But like Beethoven, he forced it into the iron clamps of classical strictness. He hated grandiloquence, pompousness, and theatricality; he never allowed extramusical thoughts, not even poetry, to master music; and he composed primarily in clear-drawn lines and rhythms, rather than in harmonic or orchestral colors.

This classical attitude, and the attitude of his followers, found its pseudo-philosophic reflection in the Viennese Eduard Hanslick's famous, though biased and narrow-minded, book *Vom musikalisch Schönen*, *On the Musically Beautiful* (1854).

More distinguished apostles of the art of Brahms were two noble musicians of the highest rank, Hans von Bülow (1830-1894), conductor and pianist, and the violinist Joseph Joachim (1831-1907), director of the Royal Academy of Music in Berlin (the *Hochschule*). It was Joachim's celebrated quartet that, for forty years, performed the chamber music of Brahms along with Beethoven's last and still but little familiar works.

Brahms himself, although he detested Bruckner, dissociated himself from the fanatic Wagner-hatred of the Brahmsians. He called himself the oldest and most enthusiastic admirer of Wagner and wrote to one of his zealous friends that he considered a few bars of the *Meistersinger* more precious than all the operas since composed put together.

The position of Franck is in a way similar to that of Brahms.

CÉSAR FRANCK, a Belgian who has his place in the history of French music, was born in 1822 in Liège and died in 1890 in Paris after a quiet life devoted to teaching and writing.

As a composer, Franck sided with the form-conscious, polyphonic musicians of the Brahmsian camp. On the other hand, he felt as close to the styles of Liszt and Wagner as was compatible with such an attitude. He climaxed a first, religious period with his *Six Pièces pour Grand Orgue* (1860-1862) and a frequently performed, mystic oratorio *Les Béatitudes* (1869-1879). Later, he turned to instrumental forms neglected in France. Two of them have acquired universal fame, a fervent D minor symphony (1886-1888), whose short initial motif has been called the theme of faith, and a sonata for violin and piano (1886), whose catchy canonic end-movement is the kind of tune that hopelessly haunts the player and the listener for days and days.

Camille Saint-Saëns tried in a similar way to give a modern instrumental music to France. This master, too, as a Frenchman, an entirely un-Bohemian master, and even a scholar, aimed at a strict and almost classical form. But, like Franck, he also composed a number of symphonic poems in the wake of Liszt, and among them *Le Rouet d'Omphale* (Omphale's Spinning Wheel) in 1871 and the famous *Danse macabre* (Dance of Death) in 1874. As a typical son of his nation, he was equally fond of formal beauty and of unequivocal descriptiveness.

SLAV COMPOSERS of the same period as Saint-Saëns made their entrance into the concert halls of the West not long after conquering the operatic stage. Chopin,

one generation before, had been half-Pole, half-Frenchman; he lived in France and, though the Poles are rightfully proud of him, it is an open question how much his work reflects specific Polish features. But in the generation born around 1835, a group of Russians, The Mighty Five, presented themselves as competitors in the field of symphonic music with a definite emphasis on the national spirit of Russia. They were:

Alexander Borodin (1834-1887)

César A. Cui (1835-1918)

Modest Mussorgsky (1839-1881)

Mily Balakirev (1837-1910)

Nicolai Rimsky-Korsakov (1844-1908)

Modest Mussorgsky, in whom impressionism reveres one of its patriarchs, has already been mentioned with his colorful opera *Boris Godunov*. He did not do much in the field of instrumental music, but still lives in his unfading piano cycle *Pictures from an Exhibition* (1874), in which the individual pictures are separated by an ever-recurring *Promenade* from room to room. How little pianistic in the conventional sense of the word this cycle is, can be gathered from the fact that Maurice Ravel gave it a brilliant, perhaps too brilliant, orchestration. Rimsky-Korsakov, on the other hand, was the father of both the Russian symphony and the Russian symphonic poem, and, as the second of these facts makes clear, his style was closer to Liszt than to Brahms.

Peter I. Tchaikovsky (1840-1893), who—with the exception of Rimsky-Korsakov—was a better musician than the Five and had a well-earned, lasting success all over the world, was, to the nationalistic Five, not 'Russian' enough to be included in their group. Admirably versatile, now dancing and playful, now sensitive, emotional, passionate, he has a still uncontested place in the concert halls of every continent, above all with his powerful first piano concerto in *B \flat minor* (1875) and the fifth symphony in *E minor* (1888), with his delightful, spirited *Nutcracker* suite of 1891, and the sixth, *Pathetic Symphony* in

B minor (1893). Nor has the stage forgotten two of his operas, *Eugen Onegin* (1877) and *The Queen of Spades* (1890).

The *Nutcracker* is, incidentally, the earliest outstanding score that uses Auguste Mustel's *celesta*, an improved *glockenspiel* with individual resonance-boxes to each one or two of its steel bars.

As equally welcome guests, the Czechs appeared in western concert halls under the leadership of Smétana and Dvořák (pron. dwózak). Smétana, already mentioned as the creator of one of the most exuberant comic operas, conquered the symphonic stage with the universally known *Vltava*, or *Moldau* (1853), as a part of a cycle of six symphonic poems, *Má Vlast*, or *My Homeland*. Chamber music circles are quite familiar with his two string quartets, both autobiographic in character, and particularly with that in *E minor* (*From My Life*), in which he narrates the tragedy of his deafness with a painful, lonely high *E*—the last sound he ever heard.

While Smétana was—roughly speaking—close to Wagner and Liszt, Antonin Dvořák (1841-1904), his junior by seventeen years, composed in the same spirit as Brahms, although he by no means 'followed' him. Hence, the riches of his chamber-music work and the comparative unimportance of his operas, at least outside his homeland. He spent most of his life in Bohemia, but stayed for three important years in New York, 1892-1895, and left his often played symphony in *E minor* *From the New World* (1894) as the fruit of his impressions in the land of endless plains and rattling machines, of Negroes and Indians.

This section would not be complete without making mention of a Norwegian who was no bold pioneer, no builder on a larger scale, but a thoroughly amiable miniaturist in his own right: Edvard Grieg (1843-1907). The name may evoke, in most people, dear memories of a classically simple orchestral suite, *Peer Gynt* (1875), a loosely connected number of pieces written for Ibsen's drama of the same name. But Grieg's main importance was to have provided an honest, sterling piano

music for homes all over the world that had lived on trashy salon pieces.

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21

THE LATEST GENERATIONS

1886-1948

LATE ROMANTICISM. The turn of the century brought a crisis in which the ending phase of romanticism overlapped with an exaggerated naturalism and with the anti-romantic currents of impressionism, expressionism, and, to add a novelism to those already in use, barbarism.

Perhaps the most characteristic, egocentric representative of late romanticism was Mahler.

Gustav Mahler (Bohemia, July 7, 1860-Vienna, May 18, 1911) devoted his life to conducting, which he practised with an unbending, inexorable, almost proverbial faithfulness to the spirit of the work of art—a career with modest beginnings in Austrian provincial theaters, a glorious peak at the Imperial Opera at Vienna (1897-1907), and an epilogue at the Metropolitan Opera and the New York Philharmonic from 1907 to 1911, the year of his death.

Despite the strain of his exhausting life, he was able to finish nine weighty symphonies and to begin his tenth. In the vocal field, he left many beautiful songs with piano accompaniment and, as his ripest work, *Das Lied von der Erde* (The Song of the Earth), a cycle of songs with orchestra. His best known symphony is the Second in C minor (1895), which in its last movement gives an unforgettable picture of the twilight that descends upon the world before Doomsday, of the last bird, lonely, twittering in fright, and of the Great Reveille with the chorus "Up, wake up!" In the eighth symphony

(which a resourceful manager baptized the Symphony of the Thousand for its choral and orchestral masses), he abandoned the symphonic model altogether and, in the boundless flow of voices and instruments, tried to master the world of his hope in two gigantic movements on the words of the Gregorian hymn *Veni creator spiritus* and of the conclusion of Goethe's *Faust*.

Hugo Wolf (1860-1903), an Austrian, like Mahler, became the late-romantic "Wagner of the *Lied*." In a tragic struggle, he created *Lieder* like one possessed—in the actual sense of the word—until a growing insanity took the pen from his fingers. Unlike Brahms, he gave precedence to the text and tried to serve the lyrical poem in the same spirit in which Richard Wagner had served the drama, and like Wagner, he stressed the piano part to interpret and deepen the mood and meaning of the words, indeed, to prevail on them. It is a characteristic, and probably unprecedented, proof of the respect in which he held the poems and poets that he published his *Lieder* under the flags of their writers, as *Goethelieder* or *MörickeLieder*.

It was in that late-romantic generation that two 'national' composers of rank entered the international scene, to be recognized particularly in the United States and England. One was the American Edward MacDowell of New York (1861-1908), whose fame is based on piano works, a Second, 'Indian,' Suite for orchestra, and a Second Piano Concerto. The other was Jean Sibelius of Finland (b. 1865), with seven symphonies and several symphonic poems in the line of Liszt, among them *The Swan of Tuonela* (1893), the favorite *Finlandia* (1899), and others based on the Finnish national epic *Kalevala*.

THE MAN who, larger in scope than all these masters, tried to drive romanticism to the limit and find a path into the future, Richard Strauss, has successively adopted most of the trends of his age. His symphonic poems and several

operas advance to a merciless naturalism; his *Alpensinfonie* overlaps with impressionism, and his *Elektra*, with expressionism; and from the *Josephs-Legende* on, he has shared in the contemporary return to the ballet. But though he is always new and fascinating in the opalescent many-sidedness of his style, he has never been able to steer a straight and steady course in pursuit of a goal ahead.

Richard Strauss, born in Munich on June 11, 1864, was carefully brought up to become an all-around musician. Still a young man, he entered upon the career of a brilliant conductor, which began in Meiningen under Hans von Bülow's guidance and ended in the opera houses of Berlin and Vienna.

Paradoxically enough, the man soon to be in ill repute as the most revolutionary iconoclast and cacophonist of his time, was educated with strictly classical ideals and professed his allegiance to Mendelssohn and Brahms in all the compositions of his earlier years. In his twenties, however, he passed into the progressive camp of Wagner and Liszt, and readily overdid the styles of the two older masters in an entirely personal way, proceeding to the extremes of naturalism, impressionism, and even expressionism.

In the first half of his life, he wrote mainly symphonic poems in succession to Liszt—all with a definite literary program and a strong egocentric, self-portraying trend. They were:

Don Juan, Op. 20 (1889)

Macbeth, Op. 23 (1890)

Tod und Verklärung (Death and Transfiguration), Op. 24 (1891)

Till Eulenspiegel, Op. 28 (1895)

Also sprach Zarathustra (Thus Spake Zarathustra), Op. 30 (1896)

Don Quichote, Op. 35 (1898)

Ein Heldenleben (A Hero's Life), Op. 40 (1899)

Sinfonia Domestica, Op. 53 (1904)

Eine Alpensinfonie, Op. 64 (1915)

The latter symphony was no symphonic poem in the proper sense, and anyway was a straggler. For in the second half of

his life, the master concentrated on dramatic forms, on opera and ballet, at which he had tried his hand in earlier days. In his stage music, both in its topics and its musical treatment, he veered easily from Nordic, Wagnerian mythology to Bavarian legend, from oriental to Hellenic antiquity, from Mozartian Louis XVI to Lullyan Baroque, from epic passion to the informality of modern everyday life:

Guntram, Op. 25 (1894)
Feuersnot (Fire-Famine), Op. 50 (1901)
Salome, Op. 54 (1905)
Elektra, Op. 58 (1909)
Der Rosenkavalier, Op. 59 (1910)
Ariadne auf Naxos, Op. 60 (1911-1917)
Josephs-Legende, Op. 63 (1914)
Die Frau ohne Schatten (The Woman Without a Shadow),
 Op. 65 (1919)
Intermezzo, Op. 72 (1917-1923)
Schlagobers (Whipped Cream), Op. 70 (1922)
Die ägyptische Helena, Op. 75 (1927)
Arabella, Op. 79 (1933)
Die schweigsame Frau (The Silent Woman), Op. 80 (1935)
Friedenstag (Day of Peace), Op. 81 (1937)
Daphne, Op. 82 (1938)

NATURALISM, so dear to the age of Emile Zola and Gerhard Hauptmann, showed itself first in the opera, far beyond the naturalistic trends of Wagner. While Verdi was stunning the world with the marvels of his last two works, *Otello* (1887) and *Falstaff* (1892), the young Italian generation started a new dramatic style, *verismo*, or Style of Truth, in which some story from everyday life, invariably ending in bloodshed, was worked out in an often curious mixture of *fin-de-siècle* naturalism and Italian delight in beautiful, sensuous melody.

The veristic movement set in with Pietro Mascagni's *Cavalleria rusticana* (1890) and Ruggiero Leoncavallo's *Pagliacci*

(1892), and had an unparalleled success, due probably to a reaction against the heavy Wagnerian music drama, its grandiloquence, intellectuality, and estrangement from life—or, better, against the music drama of the Wagner epigones.

It is a remarkable fact that neither of these gifted men was able to repeat his hit in any later operas. Nor had any of their many successors a better fate.

Giàcomo Puccini (1858-1924)—the same age as Leoncavallo and older than Mascagni—was close to verism in the earliest of his successful operas. *La Bohème* (1896) had its scene laid in contemporary Paris, and if there was no bloodshed, at least it ended in a death from tuberculosis. But his later operas were different. *Tosca* (1900), the drama of Roman secret police, *Madama Butterfly* (1904), the drama of a deserted Japanese girl, *La Fanciulla del West*, or *The Girl of the Golden West* (New York 1910), the three short one-act operas of 1918, *Il Tabarro* (*The Cloak*), the lachrymose *Suor Angelica* (*Sister Angelica*), and the witty, lightfooted *Gianni Schicchi* (pron. skickee), united under the title of *Tríttico* (triptych), and finally the gruesome, colorful Chinese story of *Princess Turandot* (performed in 1926 after Puccini's death)—all show an astonishing mixture of naturalism and sentimentality, of Italian *cantabile* and impressionistic harmony in a thoroughly romantic spirit.

The Italian verists had a French brother-in-arms in Gustave Charpentier (b. 1860), who gave his anti-Wagnerian opera *Louise* (1900) the unprecedented, challenging subtitle *roman musical*. It was another *Bohème*, with the setting once more in the world of Montmartre artists, written in prose, and composed in a naturalistic *stile recitativo e rappresentativo* without the appeal of Italian *belcanto*.

Outside verism, the most palpable form of musical naturalism has been the suggestive reproduction of extramusical sounds or noises within the frame of a musical work; and in this limited field, the dose of naturalism is weakest where such noises are merely suggested by adequate musical means,

stronger where they are faithfully imitated by adequate musical means, and strongest where the composer recurs to extramusical means. It is moderately naturalistic when, at the beginning of *Die Walküre*, rumbling doublebasses suggest a gale, and highly naturalistic when Ravel provides a wind-machine for the score of *Daphnis et Chloé*; it is moderately naturalistic when the *Waldweben* in Wagner's *Siegfried* suggests the twittering birds, and highly, extremely naturalistic when Respighi adds to his orchestra the phonograph record of a living nightingale in *The Pines of Rome* (1924).

Thus, *futurismo*, or, as the French say, *bruitisme* (Noise Style), did not point to the future, but was an ultimate climax of naturalism. Launched by Francesco Pratella in 1912 to catch the spirit of the machine and of electricity, of factories, railways, liners, battleships, cars, and planes, it was realized to its full extent by Luigi Rússolo in 1914 with the aid of especially constructed noise-instruments.

Arthur Honegger (b. 1892) wrote a *mouvement symphonique* in 1923 under the title *Pacific 231*, to glorify a steam-engine, but the imitation is restricted to musical means, and the emotional experience of driving was more important to the composer—if I understand him correctly—than a faithful rendition of the noise of his machine. And the same seems to be true of George Antheil's *Airplane Sonata* for piano (1931). Naturalism, rarely absent in any musical period, reached beyond the climax of the 1910's.

IMPRESSIONISM was the most momentous of the anti-romantic currents, in poetry, painting, and music.

Impressionism is anti-classical as well. 'Classical' masters have always striven for an art in which the essentials of life and nature are stripped of the unessential, and in which the temporal is lifted into the realm of eternity. Impressionism, on the contrary, is interested in the temporal, indeed, in the

momentary, transitory. It is, therefore, concerned with motion rather than station; with the appearance of a thing under a certain light and shadow rather than with the thing itself; with the vagueness and subtlety of passing moods and reflexes rather than with clean-cut characters, structures, or lines.

In keeping with impressionistic painting and poetry, impressionistic music did away with melody, form, polyphonic weaving, and the logical succession of chords in 'functional' harmony. Instead, it needed the iridescent play of dreamy, unrelated chords and of shady, broken colors. If such play was not robust, it was dainty and delicate; if it lacked the backbone of vertebrates, it had at least the fragile beauty of butterflies.

The flag-bearer of musical impressionism was Debussy.

Claude-Achille Debussy was born on August 22, 1862, in St. Germain-en-Laye near Paris and died on March 26, 1918, in Paris. After traveling in Switzerland, Italy, Russia, and Germany in his formative years, he was able to dedicate his life almost exclusively to composition.

The main conflict of those formative years was his great admiration for Wagner, on the one hand, and, on the other hand, his conviction that music, and French music particularly, had to turn its back upon the German master in order to find a path into the future.

The path he sought and found is marked by his first success, the *Prélude à l'après-midi d'un Faune* (1892), after Stéphane Mallarmé's poem *Eclogue*, which is still reminiscent, in its conception, of Liszt's symphonic poems, and yet is pioneering and new in its musical language. His path is further marked out by many later works, of which we might mention three *Nocturnes* for orchestra (1899), called *Nuages* (Clouds), *Fêtes*, and *Sirènes*; another symphonic poem in three divisions, *La Mer* (1905); an opera, *Pelléas et Mélisande* (1902), after Maeterlinck's drama, in which the role of music is reduced to creating emotional atmosphere; a mystery play, *Le Martyre de Saint Sébastien* (1911); and an important number of delicate works for piano, chamber ensembles, and voices.

The essential traits of Debussy's unprecedented language have been described in the general delineation of impressionistic music. Among his specific means of expression, the so-called, often-imitated whole-tone scale deserves a short explanation. At the World's Fair in Paris, 1889, Debussy heard a Javanese orchestra and was fascinated not only by its exotic flavor and charm, but also by one of the genders in which it played, *salendro* (cf. page 19), in which five steps per octave proceeded in equal sizes of six-fifths of a tone. His interest was not aimed just at this awkward size of step, but rather at the fact that such a scale was not 'functional.' The lack of tonic, dominant, subdominant, and 'leading' semitones allowed the melody to lose itself in freedom and vagueness without being forcefully 'led' to the tonic or the dominant. In adopting this kind of scale, Debussy had, however, to adapt it to western needs and possibilities; instead of five oversized steps, he gave his whole-tone scale six tones of the usual western size.

Closest to Debussy, although not in the least dependent upon the older master and in a way more classical, more conscious of structure and line, was his compatriot Maurice Ravel (1875-1937), who is particularly well known for his *Pavane pour une infante défunte* (Pavane for a Deceased Infanta) for piano (1899), his one-act opera *L'Heure espagnole*, or *The Spanish Hour* (1907), and his symphonic, ballet fragments *Daphnis et Chloé* (1909-1911).

Though nowhere stronger and purer, impressionism was not a national movement of France. It sprang up also in England with the orchestral variations *Appalachia* (1905) of Frederick Delius (1862-1934) and with the orchestral and chamber music works of Cyril Scott (b. 1879); in Italy with Ottorino Respighi's *Fontane di Roma* and *Pini di Roma*; in Spain with Manuel de Falla's two operas *La Vida breve* (1907) and *El Retablo de Maese Pedro*, or *The Altar of Master Peter* (1922), as well as with his ballet *El Sombrero de tres Picos*, or *The Three-cornered Hat* (1919). But with Falla we are already miles away from orthodox impressionism. And so we are with

the two great Spanish masters at his side: Isaac Albéniz (1860-1909), whose fame is based on a dozen piano pieces under the title *Iberia* (1906-1909), and Enrique Granados (1867-1916), with his piano pieces *Goyescas*, or *In the Manner of Goya* (1912-1914).

And this is also true of two other masters, one American and one Russian.

The American, Alsatian-born master was Charles Martin Loeffler (1861-1935), with his *Pagan Poem* for piano and orchestra (1909) and his *Hora mystica* (unpublished) for orchestra and male chorus, the former piece with a definitely American flavor, the latter (allegedly) with a fascinating synthesis of German polyphony and a delicacy of timbre due to the French impressionists.

The Russian master—who, as a border-phenomenon, resists any labeling—was Alexander N. Scriabin (1872-1915), composer of a *Poem of Ecstasy* for orchestra (1907-1908) and of a *Prometheus* (1909-1910), in which he not only added a light-projecting color-clavier to the chorus, orchestra, piano, and organ, but also based his melody and harmony on a “mystic” chord, C F# Bb E A D, which anticipated in principle the tone-rows of the twelve-tone system of Schoenberg’s days.

And with such affinity we are not far from expressionism.

THE NAME *EXPRESSIONISM*—the last of the post-romantic stages—has often been used but rarely understood. Expressionism, as this book comprehends it, tries to give an outer shape to inner and often subconscious experiences. It does not, like impressionism, try to shape impressions on our senses from without. It never renders, or even imitates, what nature presents to the eyes and the ears. Indeed, it opposes naturalism and its delight in the chance reality of being. Abandoning nature to the photographic camera, the expressionist expresses his inner vision. In doing so, he readily distorts the

organic forms of nature into a dream-like grotesqueness and nightmare and forces them into some abstract pattern.

This definition obviously applies to painting, sculpture, and poetry. But it applies to music, too. The inner vision of man is always its proper field. Expressionism in music begins with the defiance of nature and normalcy and the strife for their antonyms, the abnormal and the unnatural. Expressionistic music 'distorts.'

Musical expressionism came to life with Schoenberg.

Arnold Schoenberg, born in Vienna in 1874, started in the wake of Wagner's romanticism. He wrote a Tristanic string sextet *Verklärte Nacht* (Transfigured Night) in 1899, piled up the gigantic orchestral and choral masses of his *Nordic Gurre Lieder* in 1901, and caught the mystic accents of Maeterlinck's play in a symphonic poem *Pelleas und Melisande* in 1905.

But within a few years he found his own way. In songs, in a *Kammersymphonie*, and in string quartets, he turned from bulky orchestras and choruses to limpid chamber music, and there destroyed tonality in the traditional sense with its keys, relationships, and triads. Three years after *Pelleas*, he reached a full-grown expressionism with the *Klavierstücke*, Op. 11 (1908), the monodrama *Erwartung* (Expectation), Op. 17 (1909), and, eventually, the melodramatic cycle *Pierrot Lunaire*, Op. 21 (1912) for instruments and a female voice part between speech and recitative.

The gangway to the shores of tradition, convention, and 'nature' is cast off. Melody seems distorted, labored, grotesque to the utmost. The functional play of con- and dissonance, and even the non-functional harmony of the impressionists, has yielded to a chance coincidence of notes which cannot but be cacophonous to listeners trained in hearing vertically.

The expressionist movement culminated in 1921 with the opera *Wozzeck* by Alban Berg, the most outstanding of Schoenberg's disciples, and had an epilogue in Béla Bartók's pantomime *The Marvelous Mandarin* (1926).

Much as there are naturalistic elements in this latter work,

or, for that matter, in Bartók's earlier ballet *The Wooden Prince* (1914-1916), his acceptance of the ballet in its pantomimic form was an anti-naturalistic step, since dramatic action, left to the measured pas of dancers, renounces any pretense of giving a faithful, convincing picture of actual life.

Only a few years earlier, the young Igor Stravinsky (born in Oranienbaum near St. Petersburg in 1882 and now in this country) had turned his back on tradition—exactly at the time of Schoenberg's revolution. In connection with the rise of the Russian Ballet under Sergei P. Diaghilev and Michael Fokin, Stravinsky created his earlier ballet scores:

The Fire Bird, a dance tale (1910)

Petrouchka, burlesque scenes (1911)

Le Sacre du Printemps (*The Rite of Spring*), scenes of pagan Russia (1912-1913)

Pulcinella, ballet after melodies of Pergolesi (1920)

BARBARISM. *The Rite of Spring*, thunderous, irresistible, savage, seems to belong to the 'barbarism' of the 1910's—the term not being meant in any derogatory sense—which revolted against the personal and sophisticated emotions of both the romanticists and the impressionists and against the abstractions of the expressionists. It is not an accident that Béla Bartók gave one of his piano pieces (1910) the symbolic title *Allegro bárbaro*.

Such flight from decline, disintegration, and oversophistication into the lands of fresh, untapped resources, led to a movement that has very inadequately been described as nationalism. True, Bartók not only went back to authentic Hungarian melodies (against the pseudo-Hungarian music of the Liszt and Brahms period), but even collected and investigated them as an accomplished scholar. True, Stravinsky drew from the treasure house of Russian folk music, from its wild and vigorous tunes and rhythms. True, the Spaniards and Latin-Americans

eagerly picked up what they found in their native countries. But 'nationalism' in the proper sense of the word—sentimental, mystic, aggressive—is the prerogative of romantic, not of anti-romantic, styles. And so is exoticism for the sake of spice and flavor. Stravinsky's Russianism and Bartók's Magyarism were rather a return to the elements, to sources strong, unadulterated, original, as a way out of the wrecked heritage of the past.

Thus, it was possible for non-Americans, more than Americans themselves, to turn to the American scene, just as the exhausted ballroom of Europe was turning to American maxixes, cakewalks, turkey trots, shimmies, and tangos.

American folk music was so much the more important as it was preponderantly instrumental, whereas most other countries had offered vocal styles. Its unorthodox language consolidated first in ragtime and later in jazz. Ragtime refreshed the uniform beats of our 'serious' music with its stimulating counter-accents, and jazz fascinated with its unconventional counter-rhythms and a strange palette of winds and percussion in unprecedented colors.

Stravinsky, "who first revitalized our rhythmic sense" and, as Aaron Copland nicely remarks, "gave European music what amounted to a rhythmic hypodermic," was the earliest great composer to draw from this new world of music. In 1918, the year of Debussy's death, he presented a *Ragtime* for eleven instruments and showed the influence of tangos, two-steps, and jazz in *L'histoire du soldat*. The Frenchman Darius Milhaud followed in 1920 with a ballet *Le bœuf sur le toit* (The Cow on the Roof), the German Paul Hindemith in 1922 with a *Suite für Klavier*, and the American Aaron Copland in 1926 with a *Concerto* for piano and orchestra—to name just a few. As a peak, George Gershwin wrote in 1924 his *Rhapsody in Blue* for jazz orchestra and piano, and in 1935 his folk opera *Porgy and Bess*. But at the time of *Porgy and Bess*, the influence of jazz on serious music had already faded; notwithstanding a few stragglers, the jazz-sponsored section of music seems

to have ended in 1928 with Constant Lambert's *Rio Grande* for voices and orchestra.

The percussive, stamping barbarism in all these forms not only killed the remains of harmony that the impressionists had spared; it went on to a "reckless counterpoint," which freely combined melodic lines in different keys, without ever caring for either traditional logic or even attractive effect. This polytonality—to adopt a name not quite to the point—abandoned the vertical orientation of five centuries of musical hearing and resumed, in a way, the horizontal orientation of medieval polyphony.

NEOCLASSICISM. The second generation of this latest age experienced the momentous clash between two opposite trends in what most people carelessly throw together as one 'modern' music, between the ultimate exaggeration of egocentric currents in a wild and often noisy expressionism and the radical reversal to a less emotional, less personal, and formally stricter style.

This latter style had long been on its way. It had begun as a retrospective, antiquarian movement, which eventually proved to be the crucial step forward.

Its earliest symptom was the growing interest that the musical world took in the work of music historians (generally without realizing it) and in the rapidly increasing stock of unearthed music from the times of Bach and before. This interest appeared in frequent concerts on more-or-less authentic, ancient instruments and in the slowly progressing fight against the excesses of the romantic organ.

This fight broke out in the early years of the twentieth century with Dr. Albert Schweitzer's slogan "Back to Silbermann" (who had been the leading organ-builder closest to Bach in

time and place). In its second phase, carrying the retrospect still further back by a hundred years, this fight led to the first reconstruction of a so-called Baroque organ, with essentially less wind-pressure and with sharply contrasted colors after a detailed description in Michael Praetorius' *Syntagma musicum* of 1619. Dr. Wilibald Gurlitt, professor at Freiburg, had suggested and the organ-builder Oscar Walcker in Württemberg had made the reconstruction in 1921. Much more than an antiquarian curiosity, this reconstruction has had a wide influence; an ever-growing number of similar organs have been built in several countries, both for old and for modern music. In the United States, this has been done by Holtkamp in Cleveland, Ohio, and by G. Donald Harrison of the Aeolian Skinner Co. in Boston, from 1935 on.

Not only in organs and other instruments of yore do our contemporary composers discover some of the traits that they are striving for in their own attempts, but also in the older music itself, and particularly, a balanced form as the only way out of anarchy, and restraint in emotion after the overstressed sentiment of late romantic days. Forms of the seventeenth century come back in modern disguise—the fugue and the *toccata*, the *passacaglia* and the *concerto grosso*. The Bavarian Max Reger (1873-1916) must be mentioned here as one who, even before this later Baroque revival, led polyphony to a last hypertrophied growth. But Reger had never left the realm of romantic art in the wake of Brahms.

The new endeavors around 1922 disclaimed their association with the Baroque and consolidated under the slogan of *neoclassicism*—a title as good and as bad as any word that covers a style.

The man whom neoclassicism claims to be its father, or at least its godfather, was not Reger, but Ferruccio Busoni (Empoli 1866-Berlin 1924), creator of the opera *Doktor Faust* (1916-1924), who, being half-Italian, half-German—both racially and musically—had by nature the supranational attitude

that seems to be necessarily connected with classicism. Rarely has there been so stunning a union of Germanic polyphony in the wake of Bach and of Italian nimbleness, limpidity, and composure. Busoni's own classicism started far back in the previous century, but it became momentous and formative only in the second decade of the twentieth century, and moved to the center of general attention in 1922 with a manifesto that he published in the magazine *Melos* (Berlin), from which I quote, in Nicolas Slonimsky's translation:

"Anarchy is not liberty. . . . Far from discouraging the use of every effective means in the workshop of our possibilities, I only ask that these means should be used in aesthetic manner, that the proportions of measure, sound, and intervals should be skilfully applied, that a work of art, whatever its nature, should be elevated to the rank of classic art, in the original sense of final perfection."

A few months before this manifesto, the first Praetorius organ had been built, Busoni himself had published a *Toccata, Preludio, Fantasia, Ciaccona* for piano, and Katherine Ruth W. Heyman had written a book on *The Relation of Ultra-modern to Archaic Music*. The movement eventually reached those circles of the western hemisphere which draw from native folk tunes, rather than from the heritage of Europe. The greatest Latin-American composer, Heitor Villa-Lobos (b. 1881), has tried to merge the style of Bach with the idiom of Brazil and the language of modern music in his suites *Bachianas Brasileiras* (1932ff).

Busoni was also interested in cleaving the semitone into two quartertones or three sixths. Attempts in this direction had been made before him. A quartertone piano was given a patent as early as 1892; and the German Richard H. Stein had written violoncello pieces for quartertones in 1906; Ernest Bloch (b. 1880) introduced quartertones in his piano quintet of 1923; and in the same year Russian composers founded a society for quartertone music in Leningrad. The idea was taken up more consistently by the Czech Alois Hába at about the

same time, and, after him, by I. Vishnegradsky and by Hans Barth (b. 1897) in New York. Indeed, the Mexican Julián Carrillo and others went down to eighth and sixteenth tones. None of these systems, however, has taken root anywhere.

THE NEOCLASSICAL BREAK affected all the leading masters. Perhaps the most obvious cases are Stravinsky and Hindemith.

Paul Hindemith (b. 1895 near Frankfurt-on-the-Main and now professor at Yale University) is the most 'Gothic' among modern composers; he is basically polyphonic in a horizontal sense, unconcerned with pleasing sound, engrossed in structural interests, Nordic, and, on the whole, objective. It is not possible yet to indicate with surety what are his most significant works. Among his compositions for the stage, probably the comic opera *Sancta Susanna* (1922), the tragic opera *Cardillac* (1926), and *Mathis der Maler* (1934), the latter little or never performed, but widely known in an instrumental suite of three movements; among his concert vocal pieces, the cycle of songs after Rainer Maria Rilke's *Marienleben*, or *Life of Mary* (1924); but among his chamber music, the author does not dare to choose. And in the riches of Hindemith's creation, too, there is a marked change in the 1920's to a less revolutionary, almost classical style. Along with his restless composition, he is a devoted teacher, author of books on the technique of composing, and conductor of impressive performances of medieval and early Renaissance music.

Igor Stravinsky veered in a similar way from his earlier elemental barbarism to an often archaic strictness in his later works.

But we shall not try to oversimplify. Stravinsky has always been conscious of structure, although his form has never been that of either the classicists or the romantics, and has remained particularly far from the symphonic 'development.' He has

always been almost crudely clear, direct, concise, and is today, after forty years, just as unemotional, if not 'de-humanized,' as in his beginnings. Nevertheless, he abandoned the churning massiveness of the Rite of Spring and of *Les Noces* (begun in 1914) around 1918, the year of *L'histoire du soldat*. He devoted himself next to chamber-music forms, and particularly to those for wind instruments, then reached a peak of solemn grandeur in the opera-oratorio *Oedipus Rex* (1927) and the *Symphony of Psalms* for chorus and orchestra (1930), and has finally attained to an ever-growing clarity, which has come to a climax in the C major symphony of 1940, a *Tango* for violin and piano (1941), and the so-called *Ebony Concerto*, for clarinet and swing band, of 1946.

How much this neoclassic art in all its shades has gone away from naturalism, appears from a trend already visible in the age before and discussed in the preceding chapter: the opera has been neglected or at least de-dramatized—Stravinsky's *Oedipus Rex* of 1927 is an opera-oratorio.

Instead, much attention is being given to the ballet. Béla Bartók wrote *The Wooden Prince* in 1922, Darius Milhaud, *Le Train bleu* (The Blue Train) in 1924; Paul Hindemith, *The Demon* in the same year; Igor Stravinsky, *Les Noces* (The Wedding), choreographic Russian scenes, from 1914 to 1923, *Apollon Musagète* (Apollo Leader of the Muses), in 1927, and *Card Party* in 1936. To mention just one outstanding American contribution, in 1938, Walter Piston wrote *The Incredible Flutist*.

ARNOLD SCHOENBERG'S later position is different from neoclassicism and yet in the same opposition to anarchy. In his expressionistic period, he repudiated the tonal relationships, that the eighteenth and nineteenth centuries had established, both in melody and in harmony; he became 'atonal.' At the time of neoclassicism, he developed

from this rather negative concept to the positive concept of the twelve-tone technique.

The *twelve-tone technique* rests on some 'tone-row,' or 'tone-series,' which represents an arbitrary arrangement of all the twelve notes of the octave. This arrangement cannot be changed during a piece, but it can be 'inverted,' so that each step upward is replaced by a downward step of the same size, and vice versa. And it can also be read backwards in both its original and its inverted sequences, and, furthermore, can be transposed into each of the twelve possible keys. These manipulations result in twice two-times-twelve, or forty-eight, mutations.

Schoenberg first used the twelve-tone technique in a consistent form in *Serenade*, Op. 24 for violin, 'cello, clarinet, bass-clarinet, mandolin, guitar, and deep voice (1921-1923). In 1925, his disciple Alban Berg (1885-1935) followed with a *Kammerkonzert* for piano, violin, and thirteen wind instruments.

Incidentally, Schoenberg's twelve-tone technique must not be mistaken for the twelve-tone system of Josef Matthias Hauer (b. 1883), which rests on the almost half a billion possible combinations of the twelve tones.

One name so often mentioned today in the symphonic field must be added here: Dmitri Shostakovitch (b. St. Petersburg, 1906). Endowed with a particular gift for melodic invention, the master made a sensation with his first symphony in 1926, reached a peak of 'modernism' with the opera *The Nose* in 1930, and has calmed down to the greatest simplicity in the 1930's and 1940's.

ONE OF THE CHARACTERISTICS of the new style is the aversion to exaggerated expression marks, such as the *ppppp* in Verdi's *Requiem* or the *pppppp* in the first movement of Tchaikovsky's *Pathetic Symphony*. In a

similar way, the new generation has objected to the ever vacillating, restive, and often senseless ups and downs, fortissimi and pianissimi, crescendi and decrescendi so dear to the nineteenth century. The so-called Baroque organ of 1921 (page 219), and even the back-to-Silbermann organ, had already rid themselves of the extreme contrasts and the lachrymose swells of the nineteenth century. In Paris, the composer for piano, Eric Satie (1866-1925), naughty child of modern music and center of the revolutionary group of *Les Six* (Auric, Durey, Honegger, Milhaud, Poulenc, and Germaine Taillefer), ridiculed the eternal 'expression' for the sake of expression with caricaturing marks like "*devenez pâle*" (turn white) or "like a nightingale with tooth-aches." Two years before Satie's death, in 1923, Igor Stravinsky published an octet for wind instruments, and expressly forbade the horror-stricken conductors to make use of crescendo and diminuendo or any other shade, the better to bring out the structure of his work. This and later works—the *Symphony of Psalms* for example—proceed in a general *mezzoforte*. Men like Hindemith have even advocated composing for some automatic machine in order to protect their creations from the meddling of 'personal' interpreters.

THE PUBLIC, musical or otherwise, knows little of the complex problems and trends in the minds of our composers and reproducing musicians, and still less of the works themselves. An unprecedented, indeed, catastrophic, gap has opened between the creative master and the music lover, between music and society.

In a painful realization of the untenable position "of working in a vacuum," as Aaron Copland puts it, many 'modern' composers have tried to bridge the gap between supply and demand. They have attempted it either by introducing familiar, popular elements into their music or else, vice versa, by adapt-

ing art music to the limited needs and capacities of laymen and children. Popular elements have been introduced on the continent and in England in a revival of the ballad-opera pattern, as in Ralph Vaughan Williams' *Hugh the Drover* (1911-1914) or Kurt Weill's *Dreigroschenoper* (1928), while on the American side George Gershwin, in his famous *Rhapsody in Blue* (1924) for piano and jazz-orchestra (with strings) and his popular opera *Porgy and Bess* (1935), dragged a familiar, national element into the high-brow forms of symphonic and dramatic music.

The adaptation of art music to the naturally limited needs and capacities of laymen and children, on the other hand, has led to a novel branch of music which hardly finds a satisfactory name in the recent German word *Gebrauchsmusik*, and still less in its English, would-be translations 'workaday' and 'utilitarian' music. Whatever the name, this music is meant, not to be listened to in concert halls or opera houses, but to be played by non-musicians or children with all the limitations of their training and means. Only a few of many instances: Paul Hindemith wrote *Wir bauen eine Stadt* (Let's build a Town) for children (1931) and *Plöner Musiktag* (1932) for highschool students; Serge Prokofiev, *Peter and the Wolf* (1936), a symphonic fairy tale for children; and Aaron Copland, *The Second Hurricane* (1937), the earliest American play-opera for boys and girls. Indeed, in 1934 Arnold Schoenberg himself came out with a suite for college string-orchestras, which—lo and behold—was notated as G major after almost thirty years of abstention from key signatures. A *Theme and Variations* in G minor for band or orchestra, of a similar cast, Op. 43, followed in 1944.

There is also a trend toward carrying the modern idiom right into the early studies of beginners. It was in this spirit that Stravinsky wrote eight *Pièces faciles* for four hands in 1915 and 1917, and *Les Cinq Doigts*, or *Five Fingers*, in 1921, and that Béla Bartók published his *Microcosm* (1935).

THE ENDEAVORS TO BRIDGE the gap between the composer and his actual or potential audience have found a powerful ally in the *phonograph*, which permits a complete emancipation from the limited possibilities of concert attendance. This ally helps also in bridging the gap between the music of yore and modern listeners. It represents the latest step in an ever-growing process of making musical reproduction independent of space and of time. So far, this has been the sequence of stages:

1. Unwritten music—composer and performer are one person; his music cannot be disseminated without him nor can it last except in the uncertain forms of tradition.
2. Written music—separation of composer and performer, and modest possibilities of dissemination and duration.
3. Printed music—stronger possibilities of dissemination and duration.
4. Recorded music—complete separation of actual performance and unlimited reproduction; strongest possibilities of dissemination and duration in the original, authentic style of rendition.

The development of the phonograph itself is, in a few words:

1. Thomas Edison's recordings on wax cylinders during and after 1877.
2. Emil Berliner's recordings on disks from 1896 on.
3. Electric recordings through microphones since 1925.

IN THE FIELD OF INSTRUMENTS, innovations of a historical character have not recently been made. Even the organ and the piano have been little improved, beyond a few technical details. There is, to be true, the novel class of *electrophones*, which produce their tones by electrical

circuits, either directly by the action of hands or fingers, as in the case of the *Theremin* (1920), or indirectly by a keyboard of the traditional form, as in the *Hammond organ* (1935). But so far, all these instruments seem to belong in a history of electro-engineering rather than in the history of music. For they owe their existence to the mere and unimportant fact that electricity has proved to be a potential source of tone, while nobody has asked whether the special trends of our time require the particular tones and timbres that they can render.

The history of musical instruments and, for that matter, the history of music—like that of any other art—do not take their orders from technical possibilities. Nor do they take them from personal whims and leanings, from economic conditions, or from political edicts. Together with the other arts, music follows inner logic and laws in keeping with the ever-changing drifts of the ages, turning towards strictness or freedom, towards cooler reserve or passion. The history of music is not a random sequence of persons or forms, but a history of the human mind.

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APPENDIX

TABLE OF PARTIAL TONES AND RATIOS

| PARTIAL | RATIO | EXAMPLE | VIBRATING LENGTH | VIBRATION NUMBER |
|-----------|-------|--------------------------|---------------------|---------------------|
| 1 | 1/1 | <i>C</i> | 192 in. | 64 |
| 2 | 2/1 | <i>c</i> | 96 | 128 |
| 3 | 3/1 | <i>g</i> | 64 | 192 |
| 4 | 4/1 | <i>c'</i> | 48 | 256 |
| 5 | 5/1 | <i>e'</i> | 38.4 | 320 |
| 6 | 6/1 | <i>g'</i> | 32 | 384 |
| 7 | 7/1 | — <i>b_b'</i> | 27.4 | 448 |
| 8 | 8/1 | <i>c''</i> | 24 | 512 |
| 9 | 9/1 | <i>d''</i> | 21.3 | 576 |
| 10 | 10/1 | <i>e''</i> | 19.2 | 640 |
| 11 | 11/1 | — <i>f_#''</i> | 17.5 | 704 |
| 12 | 12/1 | <i>g''</i> | 16 | 768 |
| 13 | 13/1 | — <i>a''</i> | 14.8 | 832 |
| 14 | 14/1 | — <i>b_b''</i> | 13.7 | 896 |
| 15 | 15/1 | <i>b''</i> | 12.8 | 960 |
| 16 | 16/1 | <i>c'''</i> | 12 | 1024 |
| et cetera | | | | |

EXPLANATION

(1) The strings of stringed instruments and the air columns of wind instruments oscillate in complex vibrations. Not only do they vibrate in their whole lengths from end to end; at the same time, they vibrate in their two halves, three thirds, four quarters, five fifths, and so on. As a consequence, any individual tone that we hear is actually a whole compound of tones. The lowest of these tones, called the fundamental, is, however, so much stronger than the others that an untrained ear gives it exclusive rights without registering the weaker accompanying tones.

(2) The name given to any of these tones within a compound,

including the fundamental, is *partial*—the fundamental is the first and lowest partial. The better-known word ‘overtone’ is inadequate and obsolete and must be avoided.

(3) The first partial is produced by the vibration of the whole length of a string or an air column; the second, by that of half of the length; the third, by that of a third of the length; the fourth, by that of a quarter of the length; and so on.

(4) All the partials forming a compound that we believe to be a tone, constitute a kind of chord, which differs from all other chords in its absolute position (according to the length of the string or the air column), but is similar to them in structure. It has an octave between the first and the second partial; a fifth between the second and the third partial; a fourth between the third and the fourth partial; a major third between the fourth and the fifth partial; a minor third between the fifth and the sixth partial; two intervals smaller than minor thirds and bigger than wholetones between the sixth and the seventh, and between the seventh and the eighth partial; an actual wholetone between the eighth and the ninth partial; and so on in gradually smaller intervals, which, with the exception of one real semitone between the fifteenth and the sixteenth partial, are anonymous and have no place in our musical system.

(5) As a consequence, the ordinal numbers of the partials are far from being meaningless figures. If we take the fourth partial as an example, we find that:

(a) It is due to the vibration of a length four times smaller than the length that yields the fundamental; two times smaller than the length that yields the second partial; four thirds of the length that yields the third partial.

(b) It yields exactly the double-octave of the note produced by the fundamental; the octave of the note produced by the second partial; the fourth of the note produced by the third partial; or, in other words, it yields a note with, respectively, frequency numbers four, two, or $\frac{4}{3}$ times as high.

(6) Hence, the ratios of any two partials express:

(a) The ratio of the vibration numbers of the two corresponding notes.

(b) The inverse ratios of the two corresponding lengths of vibrating bodies. To come back to our example: the ratio of the fourth and the third partial, 4:3, expresses the ratio of two vibration numbers, say 256 and 192, and the inverse ratio of the two vibrating lengths involved, say 48 and 64 inches.

(7) The partials above the fundamental, merging more or less in the fundamental, can be singled out with the exclusion of the fundamental or any other partial below. This is done on stringed instruments by helping the string, with a slight touch of the finger, to vibrate in halves, thirds, or fourths; it is done on wind instruments by changing the pressure of the lips. In the first case, we speak of 'harmonics,' and in the second, of 'open' notes.

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